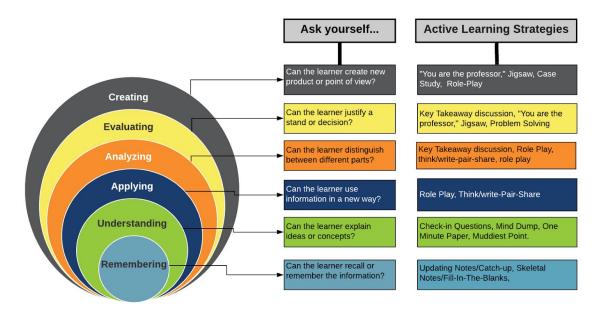
Digital Active Learning Strategies

To have students to be more engaged with content, instructors, and peers, some active learning strategies can be used in your course asynchronously or synchronously. This type of design rests on Moore's (1989) three types of interactions which allows you to create a variety of learning activities.



View this chart resources - https://app.lucidchart.com/documents/view/102c6435-8178-4596-975f-d2483acd0911#

Student-to-student interactions

- Think/Write Pair Share: Understanding, Applying, Analysing
- Role-Play: Applying, Analysing, Evaluating, Creating
- Problem Solving / Case Study: Evaluating, Creating
- Jigsaw: Evaluating, Creating
- "You are the Professor" / Stump your classmates: Evaluating, Creating

Student-to-instructor interactions

- One Minute Reflection Remembering, Understanding
- Muddiest Point Remembering, Understanding
- Mind Dump Remembering, Understanding
- Key Takeaway Discussion Analysing, Evaluating

Student-to-content interactions

- <u>Skeletal Notes / Fill-in-the-blanks</u>: Remembering
- <u>Updating Notes / Catch-up</u>: Remembering
- Check-In Activities: Understanding



Student-to-Student interactions

1. Think/Write- Pair - Share (TPS)



What is it?

TPS is a collaborative active learning strategy where students either solve or discuss an assigned topic(s). This helps students to think or write individually first and encourage them to share ideas with classmates. This activity maximizes participation, focuses attention and engages students in comprehending the topic.

How is it done remotely?



Synchronous:

- Prompt and pause during live lecture for students to think or write
- Use breakout rooms to allow small groups to share their thoughts



Asynchronous:

- Use discussion boards to provide a prompt for students to think about.
- Use the "students must post a reply before seeing others' responses" option

2. Role-Play



What is it?

Ask students to "act out" a position or argument in groups using Zoom breakout rooms or another collaborative space, to get a better idea of the concepts and theories being discussed. Role-playing exercises can range from the simple to the complex (e.g., skeptic, community member, scientist, historical figure, etc.).

How is it done remotely?



Synchronous:

• Use Zoom breakout rooms, smaller classes can role play in the main room.



Asynchronous:

- Use the discussion board to post the prompt for the role play
- Students can respond with a video recording or voice recording

3. Problem Solving / Case Study



What is it?

This activity is similar to TPS however instead of a topic to discuss, you will give them a problem or case study to solve together first and debrief the answers as a class. It's important to provide a challenging question (not an easy one!) and give them a proper time to come up with the solution(s). This can be used as a competition activity where a group that comes up with the best solution(s) or answer first will get some sort of reward (extra points, extra time for next test, etc.)

How is it done remotely?



Synchronous:

• Students can present their process using Zoom - allow them to share their screen



Asynchronous:

- Use the discussion boards to create a public space for students to share their process
- Create weekly assignments around real-life scenarios there are lots of resources for digital case studies and problem sets!



What is it?

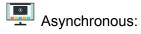
Divide the class into small groups each of which is assigned a different task. Each group completes their task. Then, new groups are formed, each consisting of one member from each of the original groups (so all group members in the new group have completed a different task). Students then take turns presenting their work to the rest of the group. In this exercise each student is an "expert" in one task and exposed to all other tasks. This activity is to help students to develop effective ways to teach a topic to other classmates. Just as a jigsaw, each classmate's part is important to complete and have the full understanding about the topic. To learn more about Jigsaw activity and 10 easy steps to implement it in your class.

How is it done remotely?



Synchronous:

- Students work in groups in breakout rooms
- Groups report back to the whole group as the "jigsaw" is pieced together



- Groups work together in group pages or collaborations
- Groups share their final product in the class discussion board where the Jigsaw is pieced together.
- Instructor summarizes the big picture through documentation or video overview

5. "You are the professor" aka Stump your classmates





What is it?

After the lecture topic, pause and ask students/group to come up with one or two questions based on what they just learned. Questions must be challenging (enough to stump their classmates). Each group will pose their questions to class. Collect the questions (they might be used as possible exam questions or to check students' comprehension).

How is it done remotely?



Synchronous:

- Students submit their questions during or at the end of live lecture via Google Doc
- Groups meet to discuss in breakout rooms
- Collect responses through surveys or guizzes in Canvas or other tool



Asynchronous:

- Students participate in asynchronous lecture
- Groups work together in discussion boards or group pages
- Students submit responses in surveys or quizzes in Canvas or other tool

Student-to-Instructor interactions

6. One-Minute Reflection / Quick Write Reflection



What is it?

After a topic has been presented, pause one minute for the student to reflect on what they've just learned. It will be helpful to give some guided questions (sample guided questions) that are addressing learning outcomes of the topic(s) for students to reflect. Although this strategy is called One minute reflection, it doesn't have to be only one minute! This strategy is meant to be a quick pause to help students to process their learning.

How is it done remotely?



Synchronous:

- Students are prompted to write reflection during or at the end of live lecture
- Collect responses through online assignment or guiz/survey



Asynchronous:

- Students are prompted to write reflection during or after asynchronous lecture
- Collect responses through online assignment or quiz/survey (possibly timed quiz)

7. Muddiest Point



What is it?

This reflection strategy is to help students to express the confusing/unclear part of the topic(s). This strategy helps you better assess student learning and helps students reflect on their learning process.

How is it done remotely?



Synchronous:

- Students are prompted to write response during or at the end of live lecture
- Collect responses through online assignment or quiz/survey



Asynchronous:

- Students are prompted to write responses during or after asynchronous lecture
- Collect responses through online assignment or quiz/survey

8. Mind Dump



What is it?

This activity is to help students to recall their learning from the previous classes. It's most effective to do this activity in the beginning of the class, before you start introducing a new topic. Take a few minutes for students to write down everything they remember from the previous module/week. This can be an individual, group or entire class activity where Google doc can come in handy.

How is it done remotely?



Synchronous:

- Allow students a few minutes at the beginning where they "mind dump" in a digital space
- This can be done privately (as a self-reflective exercise) or shared with the class or just the instructor through Google Doc or OneNote



Asynchronous:

- Post a check-in or participation only quiz that prompts students to "mind dump" at the beginning of a unit
- This can be done privately (as a self-reflective exercise) or shared with the class or just the instructor through Google Doc or OneNote

9. Key Takeaway Discussion



What is it?

Have students post one key takeaway from the topic that was learned today or module/week. This can include a highlight, ah-ha! moment, a challenge, a problem/solution, a relationship with other content, a pattern etc so that students can reflect on their learning, learn from and connect with their peers. After all students post, instructor close the forum and summarize the findings or revisit some topics to transition better to next topic/module/week

How is it done remotely?



Synchronous:

 At the end of the live lecture, prompt students to share their key takeaway through Canvas survey, Google forms, etc.



Asynchronous:

- Post this as a discussion board at the end of a module/unit
- Make sure to check the option "Users must post before seeing replies"

Student-to-Content interactions

10. Skeletal Notes/Fill-in-the-blanks



What is it?

This activity is one of the simple ways to engage students while they are participating in your lecture. Provide a set of incomplete lecture notes or PowerPoint slides with some of the parts missing for students to use while they are participating in the lecture. It is effective to choose the key words or key concepts to be blanked out for students to fill in.

How is it done remotely?



Synchronous:

- Provide the lecture notes prior to live lecture so students can open it before joining
- Display incomplete PowerPoint slides throughout the live lecture



Asynchronous:

• Provide the incomplete notes or slides for students to complete along with the video recordings or readings

11. Updating Notes/Catch-up



What is it?

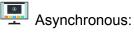
After a topic lecture is done, 2-3 mins to allow students to gather their notes and organize their thoughts before advancing on to the next content segment. This can be expanded to a short breakout room to share their notes with each other and ask any clarifying questions for a few minutes.

How is it done remotely?



Synchronous:

- Pause after sections of the lecture to allow time for students to update their notes
- Use breakout rooms to allow students to share notes and update each other



- Post shorter lecture videos or pause during recordings to allow students to make notes
- Use group/class notebooks so students can share notes

12. Check-in Activities



What is it?

Like iClicker questions, you can add check-in questions in between asynchronous videos using YuJa Quiz or provide check-in questions or discussion as a follow-up activity after the topic to help students check-in their understanding of the topic.

How is it done remotely?



Synchronous:

Polling in Zoom or iClicker/Reef polling app



Asynchronous:

 YuJa Quiz or using Canvas Assignment, Discussion or Quiz to provide this activity. To learn more on how to set them, please access how to deliver instructional videos with check-in activities.

References and Helpful Tools

- Strategies and Resources for Instructional Resilience, Learning Activities by UC Davis
- Active Learning Strategies for Remote Teaching by UCLA
- Getting Started with Active Learning Techniques by Cornell University
- Moore, M. G. (1989), Editorial "Three Types of Interaction"
- Active Learning in Digital Realms Capability Maturity Model by ASU
- 280 Interactive Technique Ideas
- 21 Great Reflection Questions That Add Depth to Student Learning
- The 40 Reflection Questions by edutopia
- Tools
 - o Student-Centered Learning Activities for Remote Teaching by Laura from UCOP
 - Reflection Template