

# Active Learning Strategies for Meaningful Engagement

## Synchronous Session Guide

This guide provides steps to map your large group session's learning objectives or outcomes and outlines different activities and tools to achieve your goals.

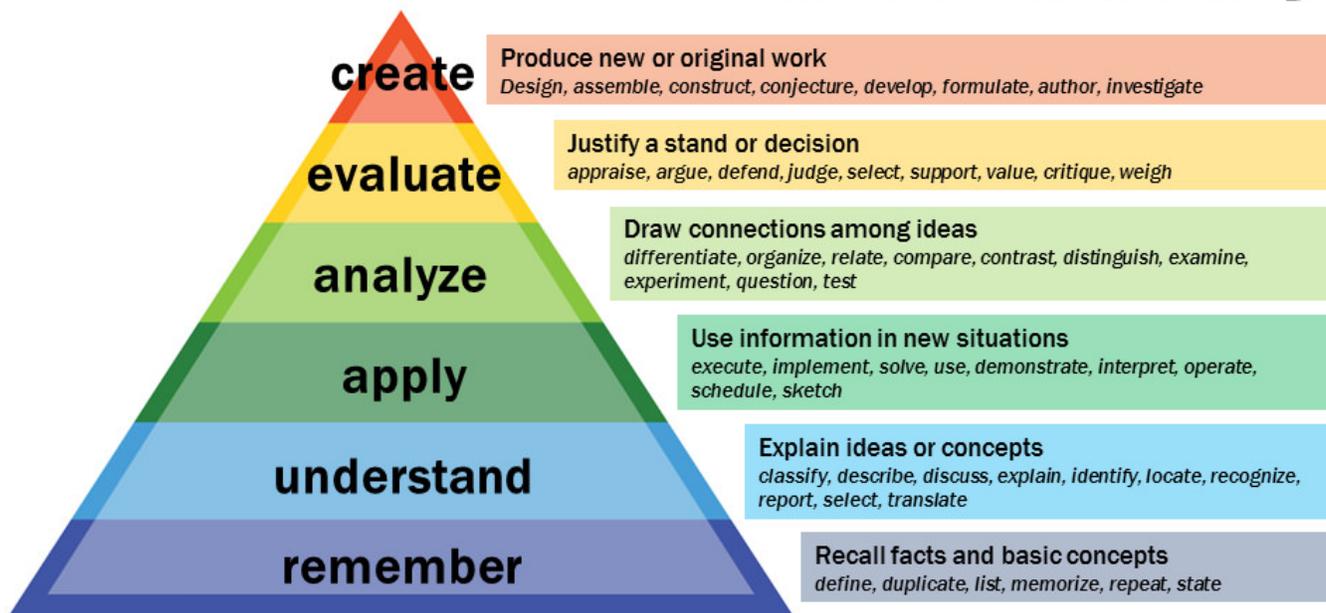
### Step 1: Content – What are you trying to achieve?

When shifting your teaching approach to a new learning environment (face-to-face, virtual, or blended), clear objectives or outcomes can provide an effective foundation for building activities and selecting tools to engage learners. One useful tool to help guide you is **Bloom's Taxonomy**.

Tasks are organized in a hierarchy with lower order cognitive skills at the bottom and higher order cognitive skills at the top. This isn't a matter of 'better' or 'worse' but rather what works for the desired learner outcome.

Each classification provides suggestions in the form of action words that can be used to create activities that work to engage and scaffold learners. It's important to select engagement activities that align with your learning outcomes.

## Bloom's Taxonomy



## Step 2: Timing – How will you interact with learners?

**Synchronous activities** involve real-time interaction with teacher(s) and learners. Ideally, activities should provide opportunities for significant interaction and collaboration between and with teacher(s) and learners. Synchronous sessions are ideal for:

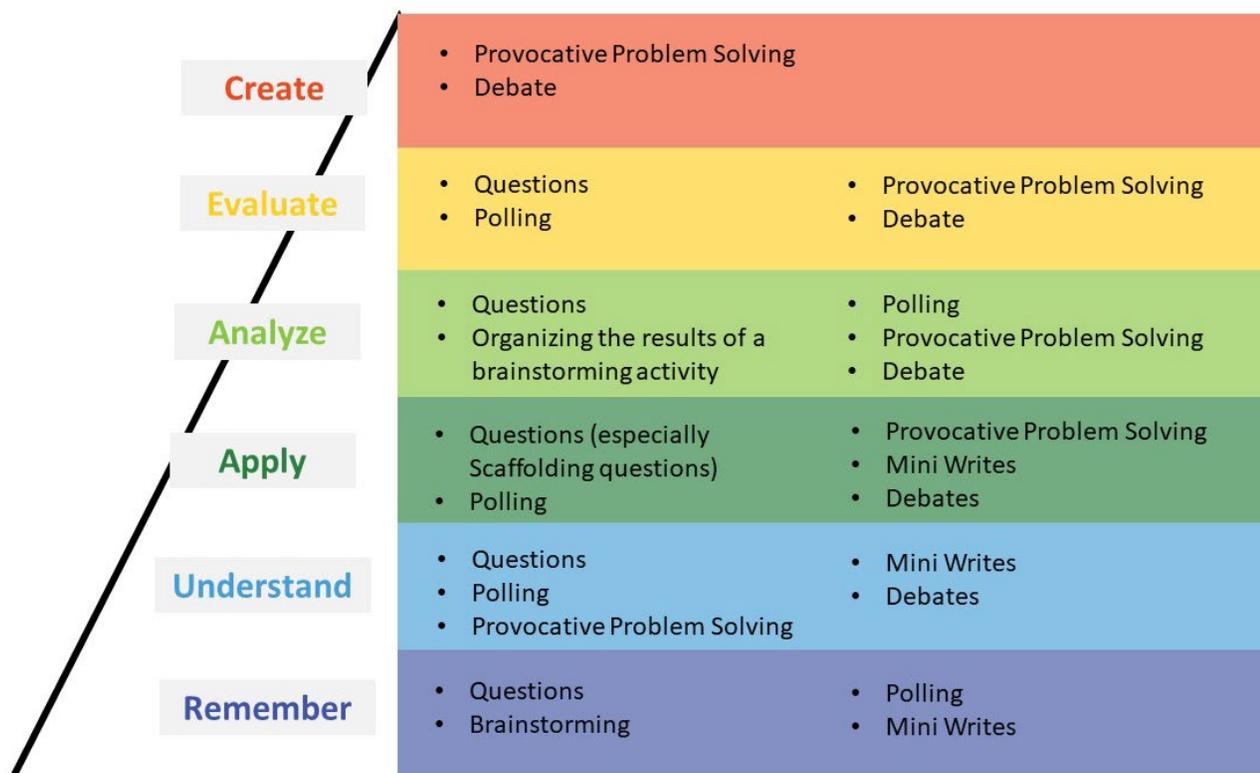
- teachers wanting to teach particularly complex material where control over the pacing and the ability to check-in with learners is important
- topics containing sensitive or difficult subject-matter where teachers would like to set the tone for the discussions and monitor participation to create a safe learning environment

Virtual activities often take longer than in-person activities since instructions have to be clearly provided for activities to go smoothly and if learners are using additional devices, such as their phone for Sli.do polls or creating and sharing a google document, additional time is needed for access before the activity can even begin. Plan for a few minutes extra than you normally would in in-person sessions for each virtual activity.

The sense of feeling overwhelmed is magnified in a distributed setting. Absent normal social cues and direct contact, both teacher and learner can feel disconnected from each other and the content. You can mitigate this by teaching around only a few key concepts but in greater detail.

## Step 3: Execution – How will participants achieve the learning objectives or outcomes?<sup>ii</sup>

The following activities align with each Bloom's Taxonomy classification:



## Questions

Questions are the simplest form of interaction and can occur at any time during the session. By asking questions, you not only turn learners into active participants, but you can also determine their understanding of a topic. Some question types and examples include:

**Open questions:** support multiple ways of thinking.

Teacher: What can you identify in the following CT scan?

**Closed questions:** have clear answers, yes or no, or the recall of facts.

Teacher: What happens during a focal onset seizure?

**Scaffolding questions:** support instructors in building upon learner's identified knowledge and providing support to bridge gaps of knowledge so concepts are understood in greater depth.

Teacher: The microbiotas shown here are often found in the respiratory tract. Given this, why do you think everyone doesn't get an ear infection?

Learner: Not sure...

Teacher: Okay, so consider the purpose of our eustachian tube?

Learner: The eustachian tube drains the ear...

Teacher: Great. Yes, the eustachian tube drains the middle ear. Now, what would happen if the eustachian tube becomes blocked with fluid and pathogens?<sup>iii</sup>

## Brainstorming

In this activity, learners generate ideas that are recorded in a visible space. When beginning a new topic, you might begin by saying, *"Tell me everything you know about..."* After collecting ideas, you might decide to put the learners' comments into categories, or you might ask learners to suggest categories and comment on the accuracy and relative importance of the array of facts, impressions, and interpretations. A central rule of brainstorming is aim to maximize volume first and save critiquing until after the idea generation time is over.

## Polling

This technique involves providing questions and giving learners an appropriate time to respond. A quiz at the beginning of a session allows you to determine how familiar learners are with important terms, facts or concepts prior to the lecture, while a quiz that follows a session segment can reveal how well learners understood the material.

## Provocative Problem Solving

Begin a session with a provocative question, paradox, enigma, or a case study. The remainder of the session is dedicated to collaboratively solving the problem. You refer back to the problem throughout the session, providing successive bits of information that help learners explore the topic and asking them to regularly update their understanding of what's going on.

## Mini Writes

Punctuating your session with short writing assignments is a powerful way to assess the degree to which learners understand the presented material. You might ask, *"Take one minute and write down the key information pearls from that last section."* Or *"Summarize the most important point of today's session (or one segment of the session) in one sentence."* Or *"Identify one concept or question you are still struggling with on this topic"*. If desired, some responses may be shared with the larger group.

## Debates

Debates allow you to add a participatory dimension to your lecture without compromising your control. You can assign learners to one side of the debate or allow them to choose a side. Before concluding, ask two or three volunteers to make summary arguments for each side.

## What tool will support your activity?

<b>Zoom tool</b>	<b>What it is useful for</b>	<b>Example</b>	<b>Synchronous or Asynchronous?</b>
Voice	Gathering verbal responses from individuals	<i>"Can someone describe a clinical experience they've had with this topic?"</i>	Synchronous
Video	Soliciting visual responses from individuals or groups	<i>"Rate your confidence with this topic out of 5 by raising 0-5 fingers"</i>	Synchronous
Chat	Collecting input from all participants at the same time, and for creating a record	<i>"What are some questions you have about this topic?"</i>	Synchronous
Response Buttons	Solicit pacing feedback	<i>"How is my pacing – too slow, too fast?"</i>	Synchronous
Breakout Rooms	Enabling group activities	<i>"Work with your group to decide what you would do if presented with this case"</i>	Synchronous
File Share	Distributing a handout, article, or resource to follow along the discussion	<i>"I have just shared a diagram of the heart with the various components labeled A, B, C, D, etc. Let's fill out the proper name for each of these components together and you can"</i>	Synchronous
<b>External Tools (outside Zoom)</b>			
Sli.do Polls	Collecting answers to multiple-choice or yes/no polls and answers to open-text questions anonymously	<i>"Go to slido.com and enter the code XXXX to answer the question 'How many chambers does the heart have?'"</i> <i>One, Two, Three or Four</i>	Synchronous
YouTube/Vimeo Videos	Show videos for context	<i>"This video shows the One Minute Preceptor in action"</i>	Synchronous Asynchronous
Google docs	Collaborative brainstorming in small groups	<i>"In your breakout groups, list all the possible presentations of a COVID-19 patient"</i>	Synchronous Asynchronous
Pen/Paper	Key messages and lessons learned	<i>"For your own learning, write down one thing you want to learn more about after this session?"</i>	Synchronous Asynchronous
Piazza Discussion board	Discussions or Q&As that can be posted/answered by both teachers and learners. Teachers can "Endorse" correct answers	<i>"Post your questions on Piazza and try to answer your peers' questions. I will login in a few days and endorse the correct responses and provide answers for any unanswered questions."</i>	Asynchronous
File sharing	Distributing a handout, article, or resource for pre/post study	<i>"Please watch this video on appropriate donning and doffing before attending the session."</i>	Asynchronous
Lecture Recording (Camtasia)	Record content for learners synchronously	<i>"I have recorded a 20-minute lecture on diabetes management"</i>	Asynchronous

**Step 4: Mapping it Out - How will you design your session?**

Content		Parameters		Execution	
<b>Bloom's Taxonomy Classification</b> What are you asking learners to do?	<b>Learning Objective/ Outcome</b> What are your session goals?	<b>Asynchronous or Synchronous</b> When will you be interacting with learners?	<b>Time allotment</b> How long will the activity take?	<b>Activity</b> What are the appropriate activities to achieve the desired outcome	<b>Tool</b> What tool will support your activity?
Remember	Memorize COVID-19 patient presentation symptoms	Synchronous	5 minutes	Questioning	Sli.do Poll

## Faculty Development Support

If you have any questions about shifting your teaching approach from face-to-face to virtual or blended modalities, please contact The Office of Faculty Development and Educational Support.



[fac.dev@ubc.ca](mailto:fac.dev@ubc.ca)



<https://facdev.med.ubc.ca/>

## Med IT Support

The Educational Technology team can support you with setting up and training for asynchronous and synchronous sessions. Contact them for help with self-recording a lecture using Camtasia or Zoom (both are available to UBC Faculty), creating a sli.do poll, or setting up a discussion board topic in Piazza.

MedIT's EdTech team is also offering drop-in clinics for faculty to test Zoom as well as get instruction on how to use the tool. A drop-in will take about 10 to 15 minutes.

Clinics run daily Monday to Friday, 12 – 1pm.



[edmedia.med@ubc.ca](mailto:edmedia.med@ubc.ca)

## References

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<sup>i</sup> Armstrong P. Vanderbilt University. *Bloom's Taxonomy*. Available from: <https://cft.vanderbilt.edu/guides-sub-pages/blooms-taxonomy/> [Accessed 2020-06-20]

<sup>ii</sup> Pylman S, Ward A. 12 tips for effective questioning in medical education. *Medical Teacher*. 2020 Apr 15:1-7.

<sup>iii</sup> This material is borrowed and adapted from the UBC Family Practice's Faculty Development guide: Engaging Learning Activities for online sessions developed by Bill Upward.



Office of  
Faculty Development  
& Educational Support