

HIPETs: High Impact Practice Engagement Techniques

Strategies for Active Learning in a Virtual Environment

What are techniques for active learning and engagement?

Active learning and engagement techniques are activities that facilitators/educators use to involve participants in the content they are covering. Through active learning and engagement techniques, the facilitator provides opportunities for participants to apply and demonstrate what they are learning.

Why use techniques for active learning and engagement?

These techniques engage participants to think critically, express and communicate ideas through different modes (writing, speaking, demonstrating), explore personal attitudes and values, give, and receive feedback, and reflect on the learning process. The facilitator should intentionally plan to foster participant-to-participant interactions. Without careful planning, interaction will likely default to facilitator-to-participant.

***Note:** This handout assumes that facilitators have sufficient Zoom training to conduct various Zoom Host functions including polling, establishing, and moving across breakout rooms, screen sharing and other Zoom tips. We highly recommend completing a Zoom training in combination with this handout as instructions below do not include detail related to Zoom functions.

In Person

Virtual

Personal Response System or Clickers	Polling
<p>Purpose: For facilitator to assess participants' understanding of the subject matter and receive immediate feedback and reinforcement for what is being learned. To provide a space for all participants to participate, including those who might share less in a large group or who are not fully prepared for that intervention session.</p>	
<p>Preparation: Obtain technology (computer with internet and personal response system device for participants). Prepare questions ahead of time and add to PowerPoint Presentation.</p>	<p>Preparation: Prior to the start of your Zoom room meeting, check your individual user settings using the Zoom website to enable the polling feature. You will also want to create your polls beforehand, considering what questions you may want to ask throughout your session. Questions can be easy, or they can be challenging, acting as a "pop quiz", including the timer!</p>
<p>Procedure: For facilitator to assess participants' understanding of the subject matter and receive immediate feedback and reinforcement for what is being learned. To provide a space for all participants to participate, including those who might share less in a large group or who are not fully prepared for that intervention session.</p>	<p>Procedure: To create a poll, go to the Meeting page on your scheduled Zoom Meeting. From the meeting management page, scroll to the bottom to find the Poll option and simply click "Add" to create a poll. Be sure to enter a title and the question that you will be using for your poll. Then, be sure to click "Save" and save the polls you are creating.</p> <p>At the time of the meeting, the Host of the Zoom room will have a Polling button on the Zoom toolbar. This will pull up the polls that you have already set up. When you are ready in your meeting, you can launch the poll. The Host is then able to close the poll whenever you are ready to.</p> <p>There will be a pop up that shows all incoming polls and will also let you know how many participants have responded. The Host can "share" the results with</p>

	the class so that everyone can see the result of the poll that was just conducted. If you need to, you can re-launch a poll but please be aware that the poll is launched from scratch. Any previous answers given will start over again.
Best When:	Best When: Like most polls, Zoom's polling feature allows you to get a sense of what the room is feeling. It is also a useful tool to get a sense of how much information your audience is understanding. Zoom's polling provides totals and does not show individual answers. You can determine individual answers in Zoom's report feature using Zoom's website. This is particularly helpful if answers will determine a grade or if you, as the facilitator would like to see how individual students fared in their responses.

Think - Pair - Share (TPS)

Purpose: Provide time to think and reflect individually and hear another's perspective in a pair.

Preparation: Identify a concept that you want participants to discuss and formulate that concept as a question. This strategy can be used before or after you discussed the concept. It allows participants time to formulate ideas before talking.	Preparation: Identify a concept that you want participants to discuss and formulate that concept as a question. This strategy can be used before or after you discussed the concept. It allows participants time to formulate ideas before talking.
Procedure: <ol style="list-style-type: none"> 1. Pose a question. Provide participants one to two minutes to think about the question individually (could also ask participants to write their response on a piece of paper). 2. Pair participants with their neighbor and ask them to discuss their respective answers. You can create clusters of three, if necessary. 3. Call on several pairs to share their responses with all the whole group. 4. Elaborate, clarify, and/or correct explanations as necessary, either by inviting other participants or doing so yourself. 	Procedure: <ol style="list-style-type: none"> 1. In the Zoom Main Room, pose a question. Ideally, also have a written version or slide that covers the topic. Provide participants one to two minutes to think about the question individually (could also ask participants to write their response on a piece of paper). 2. Note: you can include a "reflection" period here if you would like. Have all your participants "mute" their microphones to allow for reflection. Consider adding soft music in the background that helps give them some time to reflect and think. Instruct your participants that you will pair them up (and may have some groups of 3. Let them know that they should discuss their respective answers in their pair or group. Let them know that they will be moved to Zoom breakout rooms for their discussion and will have a set amount of time to discuss.

	<ol style="list-style-type: none"> 3. Create your Zoom breakout rooms and move your participants over to the breakout rooms. You can create clusters of three, as needed. 4. After the allotted time, send everyone a message that it is time to return to the Zoom Main Room. Move all participants back. 5. Once everyone is back in the Zoom Main Room, call on several pairs to share their responses with all the whole group. 6. Elaborate, clarify, and/or correct explanations as necessary, either by inviting other participants or doing so yourself.
Best When:	<p>Best When: TPS is great to build in almost anywhere! It is easy to use, requires little prep and immediately gets everyone talking, moving, and engaged! TPS is actually very easy to couple with other HIPETs or activities. It can be a good “leading” activity, when the topic is complex, and you are trying to get some initial thoughts and dialogue going.</p>

Talking Chips

Purpose: To ensure equal participation in discussion groups.

Preparation: Obtain technology (computer with internet and personal response system device for participants). Prepare questions ahead of time and add to PowerPoint Presentation.

Procedure:
Each member receives the same number of chips (or index cards, pencils, pens, etc.). Each time a member wishes to speak, he or she tosses the chip into the center of the table. Once individuals have used up their chips, they can no longer speak. The discussion proceeds until all members have exhausted their chips. Participants can use the talking chip to: give an idea, ask a question, express a doubt, respond to an idea, and/or ask for clarification.

Preparation: Consider what technology you want to use for your “chips” and how you would like to keep track of when chips are used. Padlet, Google docs and other platforms can easily be used.

Procedure:

1. Using a software platform such as Google docs, create a “board” where all participants can view when “chips” are being used. Create your board, choose your “chips”, add names and any other information that is needed. Be sure to share the link where the board is located with everyone. [Here is a sample Google doc.](#)
2. Each member receives the same number of “chips”. This is important. Be sure to give everyone the same number of chips. Also consider the number of chips you will give in advance. Typically, it is better to have less chips than more.
3. Decide what rules or parameters every chip will have. For example, if you have a large audience, consider adding a “value” to your chip such as -- “Each chip is worth 1 minute of speaking”. Then, be sure to

	<p>designate someone to help you keep time.</p> <ol style="list-style-type: none"> Each time a member wishes to speak, he or she tosses the chip into the center of the table, or, in the case of the virtual table, into their box. This indicates that they have “used” their chip, or cashed it in. Once individuals have used up their chips, they can no longer speak. The discussion proceeds until all members have exhausted their chips. Participants can use the talking chip to give an idea, ask a question, express a doubt, respond to an idea, and/or ask for clarification.
Best When:	<p>Best When:</p> <p>Talking Chips can be very helpful when you have one or two members that tend to speak more than others. It can also be very helpful when you have some students that really struggle with speaking. The visual representation of speaking helps students see the importance of their role. The more thought and preparation you put into the chips and how they will be used, the more engaging this activity can be. For example, you could designate different values for each chip (example 1-minute speaking chip, 2-minute speaking chip, etc.). This makes students really consider which chip to use and when to save their chips. If you are doing an exercise that is intentionally pointing out inequities, you could also quietly give students differing amounts of chips and then debrief what it felt like to have less time to speak.</p>

Jigsaw

Purpose: To teach a large amount of content to a group in an engaging way and to increase participant understanding by teaching content to their peers.	
Preparation: Divide a topic into a few constitutive parts or “puzzle pieces” (e.g. the different A-G requirements, the different stages of the water cycle).	Preparation: Divide a topic into a few constitutive parts or “puzzle pieces” (e.g. the different A-G requirements, the different stages of the water cycle). Meet participants in Zoom. Have Google Doc or pdf ready with content for jigsaw, set to “anyone with link can view.” Tell participants to have pen and paper ready for notetaking.
Procedure: <ol style="list-style-type: none"> Divide participants into as many groups as learning segments. For example, if the participants need to review 7 A-G requirements, organize the participants into 7 groups. Assign each group a specific learning segment. Provide directions to 	Procedure: <ol style="list-style-type: none"> Share the Google Docs link to the content in the Zoom chat. Divide participants into as many groups as learning segments. For example, if the participants need to review 7 A-G requirements, organize the participants into 7 groups. Assign the groups to Zoom breakout

<p>each group for which they are to become “content experts” on their learning segment. They will be asked to teach or present their material to other participants later in the session. Tell participants how much time is given to review the material.</p> <ol style="list-style-type: none"> It is helpful to provide participants with the main ideas and key points they should focus on as they become experts on the learning segment. After the groups complete their review, participants form new groups. The new group contains at least one participant from each “expert” group. In the new groups, each “content expert” presents information to the other participants. Tell participants how much time they have. Bring all the participants together. Summarize the information and provide missing details, as necessary. 	<p>rooms, but do not send participants to the rooms yet.</p> <ol style="list-style-type: none"> Assign each group a specific learning segment. Provide directions to each group for which they are to become “content experts” on their learning segment. They will be asked to teach or present their material to other participants later in the session. Tell participants how much time is given to review the material. It is helpful to provide participants with the main ideas and key points they should focus on as they become experts on the learning segment. Suggest that they take notes on their segment, review on their own first and then confer with their group on key points. While the groups are “becoming content experts,” create new groups which have at least one participant from each content group. When time is up for the “content expert” round, bring the participants back to main Zoom room while you set up the new groups. Tell participants that they will now be in new groups, with at least one participant from each “expert” group, where they will teach their segment of the content. In the new groups, each “content expert” presents information to the other participants. Tell participants how much time they have. Bring all the participants together. Summarize the information and provide missing details, as necessary.
<p>Best When:</p>	<p>Best When: You need to have at least 45-50 minutes to do this activity on Zoom. A variation would be to assign the first “content expert” phase to be done asynchronously, and the “teaching” and summarizing phases done live on Zoom.</p>

Group Jeopardy (Virtual Jeopardy)

<p>Purpose: To check and reinforce participants’ understanding of material in a fun and challenging activity.</p>	
<p>Preferred Group Size: Medium to large (The larger, the better!)</p>	<p>Preferred Group Size: Medium to large (The larger, the better!)</p>
<p>Set Up: 2 groups or could make more groups</p>	<p>Set Up: 2 groups or could make more groups</p>
<p>Supplies Needed: Markers, a computer/overhead projector, jeopardy questions, buzzer set (optional)</p>	<p>Supplies Needed: Jeopardy questions loaded in https://www.playfactile.com/ or this PowerPoint Jeopardy Game 6-Topic Template to show on Zoom.</p>

<p>Procedure: Make up your own categories that correspond to the lecture material and divide everyone into 2 groups. One member from each group will compete against each other on an answer chosen from the 100-500 categories (1-5). The individual is to come up with the question for that answer. The jeopardy answers can be displayed either on a computer program, on the overhead, or simply on the white board. The team with the most points can win a prize.</p>	<p>Procedure: Make up your own categories that correspond to the lecture material and divide everyone into 2 groups. One member from each group will compete against each other on an answer chosen from the 100-500 categories (1-5). The designated individual is to come up with the question for that answer, or teams could deliberate through private chat. The correct jeopardy answers can be displayed through sharing the screen in Zoom. Designate someone to keep a running tally of the score in chat. The team with the most points wins. (Will need to be creative with the prize).</p>
<p>Best When:</p>	<p>Best When: When you want to check for comprehension or develop a fun way to review a lot of material.</p>

Kahoot

Purpose: To engage students on a topic through an interactive question and answer process.

<p>Preparation:</p>	<p>Preparation: Review the Kahoot platform at Kahoot.com, and the already built Kahoot games under the “Discover” tab. (You can sign up for a free “Basic Account”). Students will need a phone or tablet to participate.</p>
<p>Procedure:</p>	<p>Procedure: Determine what type of knowledge you are trying to engage students with. Develop questions related to that topic, and some right or wrong answers. You can have more than one correct answer. (For an example of a Kahoot with a mix of one correct answer and all the answers being correct, which can be a great learning tool, see the “Educate About Implicit Bias and Inclusion” Kahoot under the Discover tab). Answers can be true/false, one word, or phrases. Build your Kahoot. When you launch it, a pin number will appear on the screen (if you are doing it live) that students use to join with their device, putting in a nickname that will show up on the screen. As participants answer the questions, a tally appears on the screen. If doing it live, you can pause to discuss/reflect the answers, or you can move through without discussion.</p>
<p>Best When:</p>	<p>Best When: This can be live or “assigned” as an asynchronous activity.</p>

Gallery Walk

Purpose: To extract ideas and information to provide a general picture, can be an effective way to teach groups of people complex topics. For participants- to share thoughts in a more intimate, supportive setting rather than a larger, anonymous setting. For instructors- to gauge the depth of participant understanding of concepts and to challenge misconceptions.

Preparation: Prepared stations and questions ahead of time

Preparation: Choose a platform that allows you to post “stations” or posts ahead of time. Create and design your posts ahead of time. Consider your topic and develop your stations based on categories, questions, topics, or themes

Procedure:

1. The facilitator prepares several discussion questions. Participants work with more individuals or by themselves (depends on the number of participants and if you would rather have participants bounce ideas with others).
2. Questions are posted on different "stations" on meeting room walls, placed on pieces of paper on tables in different locations around the room, or typed on different computers. Plan on sufficient space for groups to congregate and discuss questions.
3. At each posted question, a team reviews what previous groups have written and adds new content. After a short period of time, say three to five minutes, but the exact time will depend upon the nature of the question, say "rotate." The group then rotates, clockwise, to the next station. The rotation continues until all posted questions are addressed.
4. As participants discuss questions, the facilitator can circulate around the room, clarifying questions, gauging participant understanding, and addressing misconceptions.
5. When the group returns to the station where it started, the group synthesizes comments and makes an oral report to the whole group.

Procedure:

1. In the Zoom Main Room, the facilitator poses several discussion questions and reviews the categories. Participants work with more individuals or by themselves (depends on the number of participants and if you would rather have participants bounce ideas with others). If you have participants working in groups, consider giving them time in a Zoom breakout room to review and discuss their topic.
2. Be sure to share the link where the “stations” are located (on Google Docs, Padlet or another platform). In this way, groups can have the document opened, can view, and can edit the main document that all participants are on. In this way, groups can be in their Zoom breakout rooms but can still be viewing all responses as posed by everyone.
3. Give participants a set amount of time to consider the topic or questions and provide responses. Consider what parameters are given for posting such as giving a rotation order, a deadline, or other parameters such as, “be sure to add a point for each station”.
4. Questions are posted on different "stations" on a virtual “wall” or “board”. Groups or members then add comments, questions, phrases, points, or items on each topic. Depending on the platform, participants can either add a new post (or “post it note”) or can edit an existing one. If you want responses to be anonymous, consider having them edit an existing one.
5. Consider adding a “Parking Lot” posting where individuals or groups can ask questions, add comments for items that do not fall into any other category. This will encourage active participation.
6. For each station, a team reviews what previous groups have written and adds new content. After a short period of time, say three to five minutes, but the exact time will depend upon the nature of the question, then "rotate" your group. If in subgroups, consider the

	<p>amount of time given. Rotations can be done in Zoom by bringing everyone back together at a specific time and then re-sending them back to the same breakout room at the next “rotation”. The rotation continues until all questions or stations are addressed.</p> <ol style="list-style-type: none"> 7. As groups are in breakout rooms discussing questions, facilitator(s) can move from each breakout room to help with clarifying questions, gauging participant understanding, and addressing misconceptions. If activity is being done individually, encourage individuals to use private chat with the facilitator to ask any question. Or, if you as the facilitator notice any hesitation, follow up with the person using private chat. 8. When the group returns to the station where it started, the group synthesizes comments and makes an oral report to the whole group. Reconvene your groups or pause the activity and bring everyone back together. Facilitator takes everyone through a review of the posting by reviewing each station at a time. As participants discuss questions, review content, the facilitator can help with clarifying questions, gauging participant understanding, and addressing misconceptions. <p><u>Samples Here.</u></p>
<p>Best When:</p>	<p>Best When:</p> <p>Gallery Walk is great when you have a topic or question that has multiple parts and you want to have feedback or points added. This is a great tool when you are brainstorming, want to understand multiple perspectives or have a topic that is very complex, and you want to understand multiple parts. This exercise is also helpful if you want to get everyone’s input quickly. Since everyone is working on different parts at different times, this method quickly gathers lots of information and input. Extremely easy to accommodate larger audience sizes by creating groups to complete each station.</p>