

## How to Make Your Teaching More Interactive

<b>Interactive Teaching Methods</b>	<p><b>Knowledge Probe</b></p> <ul style="list-style-type: none"> <li>Prepare 2-3 short-answer questions or 5 multiple-choice questions based on your presentation topic. Have learners work in pairs or alone to answer the questions, have them save their answers. The questions can be readdressed in a mid-lecture or end-of lecture activity (case that applies the concepts) to help learners see how their knowledge and understanding has increased. Posing questions at the start of a lecture can stimulate thinking about the content you will present and primes the mind to apply concepts.</li> </ul>
	<p><b>Think-Pair-Share</b></p> <ul style="list-style-type: none"> <li>Pose a question/problem. Learners spend 1-2 minutes thinking about the problem alone then pair up to discuss. Ask pairs to report to the entire class. Works well in large and small classroom settings at any time during the class. Promotes learner involvement, even those apprehensive about speaking up. Provides instructor feedback about what learners have/haven't grasped.</li> </ul>
	<p><b>Pause and Clarify</b></p> <ul style="list-style-type: none"> <li>Ask learners to discuss idea with neighbor. Pause lecture for 2 minutes while learners chat with neighbors about their respective understanding of key or difficult conceptual content. Aim is for each student to clarify their own understanding by comparing their perspective with that of their partner. Works best when teacher asks question requiring application of understanding, rather than simply recall of information.</li> </ul>
	<p><b>Quick Think</b></p> <ul style="list-style-type: none"> <li>Every 10-15 minutes insert a "quick think" exercise to increase attention, interest, &amp; learning. Participation options vary: learners can record responses individually &amp; then explain their answers to a neighbor, they can verbally generate an answer with a neighbor, or they can be asked to silently think about a possible response. Provide feedback so students can hear or share correct or possible answers. Examples include: select the best answer, correct the error, complete a sentence starter, compare or contrast, support a statement, re-order the steps, reach a conclusion, paraphrase the idea.</li> </ul>
	<p><b>Mini-Case</b></p> <ul style="list-style-type: none"> <li>Begin the lecture with a realistic case involving the concepts that will be discussed that day. Include a brief question that requires the application of key concepts. Students will each work on the question then report their answers when called upon. Mini-cases are more effective when students are presented the case beforehand (in notes, at the end of previous session or as pre-class material).</li> </ul>
	<p><b>Socratic Questioning</b></p>

## How to Make Your Teaching More Interactive

<p>Adapted from: The Interactive Lecture, An Instructor's Manual, Office of Medical Student Education, University of Arizona, College of Medicine;</p> <p>UW-Madison Teaching Academy, Office of the Vice Provost for Teaching &amp; Learning, and DoIT Academic Technology</p> <p>Bleason, BL, Peeters, MJ, Resman-Targoff, BH et al. An Active-Learning Strategies Primer for Achieving Ability Based Educational Outcomes. American Journal of Pharmaceutical Education 2011; 75 (9)Article 186.</p>	<ul style="list-style-type: none"> <li>Query learners in a manner that helps them uncover answers. Ask learners about thought process, probe assumptions, and ask for evidence. Can be used in large and small classes, but learning climate guidelines must be established: respect all around; non-judgmental attitudes.</li> </ul>
	<p><b>Minute Writes</b></p> <ul style="list-style-type: none"> <li>Pose a question about a course concept; ask learners to write a response in 1-2 minutes. Collect responses &amp; without revealing names, share sample responses &amp; give feedback. Works in large or small settings; effective technique for determining learner progress – understanding course material, reaction to course material.</li> </ul>
	<p><b>Muddiest Point</b></p> <ul style="list-style-type: none"> <li>Give learners a couple of minutes to jot down a response to the question: What was the “muddiest point” in the presentation, discussion, etc. Or, “what questions do you still have about today’s presentation?” Provide clarification in real time or online. Promotes reflection, i.d. of difficulties.</li> </ul>
	<p><b>Critical Thinking Activity</b></p> <ul style="list-style-type: none"> <li>Provide a small group breakout session designed around a thought provoking question/case that concerns the material just presented and/or builds upon concepts presented in previous lectures. After breakout, select a student from a group to respond to the question or task. Then ask others to participate by adding to the case. Finish session by providing a summary</li> </ul>
	<p><b>Jigsaw Learning Activity</b></p> <ul style="list-style-type: none"> <li>Jigsaw learning requires that learners become experts in a subject area and then teach that topic to peers who have become experts in other topics. Steps: 1) divide class into small groups of 4 to 6 students. 2) Assign each group a subject area to learn. 3) Rearrange groups so that there is 1 expert in each group. Experts reciprocally teach their peers.</li> </ul>
	<p><b>Pass the Pointer</b></p> <ul style="list-style-type: none"> <li>Place a complex, intricate or detailed image on the screen (board) and ask for volunteers to temporarily borrow the (laser) pointer to identify key features or ask questions about items they don’t understand. Provides insight into group knowledge and learner understanding.</li> </ul>
<p><b>Teach Back Process</b></p> <ul style="list-style-type: none"> <li>Learners asked to explain their understanding of topics/concepts or to demonstrate and explain a technique. Instructor (or learner) then follows up using open-ended questions to assess the learner’s understanding and/or ability to transfer that understanding to a related but new topic. It is an iterative process: “teach back, open-ended questions, address misconceptions, and then “teach back” again.</li> </ul>	

## How to Make Your Teaching More Interactive

<p>Adapted from <i>Participatory Lectures</i>, Derek Bok Center for Teaching and Learning, Harvard University, 1992</p>	<p><b>Prime your learners</b></p> <ul style="list-style-type: none"> <li>• Create a pre-class survey of knowledge to find out student assumptions/knowledge</li> </ul> <p><b>Start Strong</b></p> <ul style="list-style-type: none"> <li>• Begin session with a question(s) to help you understand what students are thinking. <i>“What image do you have of patients who are obese?”</i></li> <li>• Activate background knowledge – have learners reflect on how topic applies to them</li> </ul> <p><b>Review throughout</b></p> <ul style="list-style-type: none"> <li>• Ask questions, check for understanding, have participants explain what they learned in own words</li> </ul> <p><b>Style</b></p> <ul style="list-style-type: none"> <li>• Use a conversational tone</li> <li>• Students feel at risk when talking-deal tactfully with responses</li> <li>• Address wrong answers as bad assumptions</li> <li>• Get out from behind your podium; move closer to students when speaking</li> <li>• If you want students to talk-look at them</li> </ul> <p><b>Use variety to touch upon all learning styles</b></p> <ul style="list-style-type: none"> <li>• Show a PPT presentation with pictures, cue words, and sounds; have participants come up and describe what is on the slide; discuss.</li> <li>• Follow a brief lecture with a small-group discussion, then a role play.</li> <li>• Change pace during the session</li> </ul> <p><b>Encourage Learner Participation</b></p> <ul style="list-style-type: none"> <li>• Invite challenges</li> <li>• Pause after asking a question (at least 8 seconds)</li> <li>• Use feedback</li> <li>• Encourage peer interaction</li> </ul> <p><b>Pause in the lecture after making a major point</b></p> <p><b>Use cases to exemplify content/issues you want to convey</b></p> <p><b>End Strong</b></p> <ul style="list-style-type: none"> <li>• End lectures prior to the end of a session</li> <li>• Summarize key points</li> <li>• Use a 1-question quiz based on material just covered (individually or in groups), allow for discussion and allow time for questions</li> <li>• Use the lecture time to set up problems that will be discussed after the lecture time</li> </ul>
---	--