

Question Prompts for Facilitating Learning in Breakouts

Questions for Cognitive Domain

Benjamin Bloom and his team of researchers established several learning taxonomies, but their taxonomy for the cognitive domain has become the most popular in academic settings. Because it is so widely appropriated in educational settings, we'll use it here to map out several sets of questions.

Comprehension Questions

- What is the thesis of her argument?
- What is an example of...?
- Why did this happen?
- What are our assumptions about...?
- Who would be willing to summarize what we've learned so far?
- How would you describe this to someone for whom this is a new or foreign concept?
- Could you explain what you mean by...?

Application Questions

- If X is true, then what does that mean for...?
- Why is this important?
- Could this have happened in (new scenario or circumstance)?
- What metaphor or picture could you use to describe this to someone?
- What story illustrates this best for you?
- If we were to fast forward, ...what do you predict might happen?
- What would result if...?
- What was the turning point in...?
- I'd like you to take the point of view of _____ for a moment. How might they see this differently?

Analysis Questions

- How could you break this down into a mental model or diagram?
- What do you believe are the weakest points in this argument?
- What do we still need to know that we don't now know or understand?
- What is the most persuasive evidence for...?
- Imagine you wake up, and the problem is solved. What would you notice is different?
- To solve this, what is the most important aspect or issue to address?
- If we were to change or remove this one variable, what do you think would happen?
- What themes have you noticed?
- What aspect of this do you believe was most influential/significant?

Synthesis Questions

- What solution would you recommend?
- How might we reconcile X and Y?
- How does what we are saying relate to what we studied last week?
- If you were to start this all over, how would you begin?
- How would you improve...?
- If you could go back in time, what is the one thing you would do to change this?
- If money and time were not variables, how would you go about solving this?

- What would you recommend or propose to the people with the power to solve this?

Evaluation Questions

- What criteria would you use to decide or choose?
- How would you support it...?
- What data would you gather to evaluate?
- How would you choose? Why?
- How would you have handled this differently?
- How would you rank the following...?
- What evidence can you present...?
- How would you go about testing...?

Questions for Affective Domain

In addition to the cognitive domain, Bloom and his colleagues noted two other domains of learning: psychomotor, which deals with developing physical skills, and the affective domain.¹ We might think of *affect* as the feeling wrapped around or linked to every thought—they are inseparable.² Western learning has often tried to divorce the two or at least has ignored the affective in favor of a more analytical way of viewing the world. We find the cognitive approach more manageable and affective conversations more difficult to control. However, most conversations where we discuss significant matters will lead us into the affective domain.

Krathwohl and Bloom's thesis is that we have a certain initial response to ideas. We then begin to assign that idea or position a level of value within our outlook on life.³ We try to figure out where that new idea fits within our value system. You'll notice that this is very similar to Piaget's concepts of assimilation and accommodation.⁴ Assimilation is when a student can take a new idea, like a puzzle piece, and fit it into their existing mental frameworks. Accommodation is more challenging because learners realize their mental framework must be changed, modified in order to receive the new idea or belief. It's the difference between rearranging a room and knocking out the walls to remodel it. Accommodation is perhaps one of the most critical points in learning and one we tend to run past. It is often disorienting, and students feel vulnerable because they are, in fact, vulnerable when they open up to questioning their long-held assumptions.

What follows are some questions to ask when your learners hit these points in a more affective discussion:

Surfacing the Affective

- How should we respond to...?
- How did this make you feel?
- What is your initial reaction to...?
- How did you react when...?
- How are you experiencing resistance?
- What is your motivation level as we approach this discussion/idea?
- What is your anxiety level as we approach this discussion?
- On a scale of 1 to 10, how significant is this value within your outlook on life?

Assimilation and Accommodation

- Where do you feel a tension between this idea and the way you see the world?
- Why do you feel this doesn't work or fit within your value system?
- How is this concept confronting our stereotypes and biases?
- What do you need to continue considering this idea? (More data? A specific issue addressed by an expert? To hear the point of view from others in the group? etc.)

Questions for Adult Learners

The following question sets are based on the work of Malcolm Knowles and his 4 Principles of Adult Learning.⁵

Principle #1: Adults need to be involved in the planning and evaluation of their learning.

- We will be discussing _____. What would make this conversation most worthwhile and meaningful for you?
- We could take this conversation in any number of directions, so let's take a moment to scope out our conversation according to what would most benefit you and your various professional settings. What two or three topics would you like us to focus on in the next 45 minutes?
- What would you like to bring to our conversation?
- When we complete our discussion, how will we know it's been a success?

Principle #2: Ground the conversation in experience.

- Where have you seen this at play in your experience, profession, etc.?
- How might you have tried and failed in this area?
- Where have you seen this misapplied?
- What have you found successful?
- In what settings do you find this effective?
- Based on your experience, when is the appropriate time to use this skill, tool, or approach?
- Amanda, you have particular expertise in this area. Could you speak specifically to...?
- How might your particular background impact how you see this issue differently?

Principle #3: Be problem-centered instead of content-centered.

- What is the greatest challenge in this situation?
- What do you want to see change?
- What can this group bring to the problem that would be most helpful?
- How would you have approached this issue in the past? (Before what you have learned from this class experience?)
- See the application questions above. Provide students with cases and allow them the space to work through them and apply their learning.
- When early questions are grounded in student experiences, problem-centered questions will press further into student-presented scenarios.

Principle #4: Adult learners care about ideas that have immediate relevance to their professional and personal lives.

- If you had to put this into practice next week at work, what would be the first three things you would do?
- Why do you believe this won't work in your setting?
- Could someone provide us with a scenario from your current professional setting that we could use as a case study?

Questions about the Conversation and Meta-Cognition

- What are we missing?
- What key things should we focus on in this discussion or at this point in the conversation?
- Are we on track?
- Is this conversation accomplishing what we want it to accomplish?
- How does what you just said connect to what others have mentioned in the conversation?
- How might what you've just said challenge what we seem to have concluded as a group?
- Earlier, Sam said...How does your comment complement or perhaps challenge his comment?
- What feels unresolved about our conversation?

¹ Bloom and his colleagues originally published these as a series of handbooks, each addressing one domain. The first in the series was published in 1956:

Bloom, Benjamin Samuel. *Taxonomy of Educational Objectives: The Classification of Educational Goals Handbook I, Handbook I*. New York; New York; London: McKay ; Longman, 1956.

A more recent revision of the taxonomy was published in 2001:

Anderson, Lorin W., and David R. Krathwohl, eds. *A Taxonomy for Learning, Teaching, and Assessing: A Revision of Bloom's Taxonomy of Educational Objectives*. Complete ed. New York: Longman, 2001.

² This idea of the inseparable nature of thought and feeling was explored by William James as early as 1890.

James, William. *The Principles of Psychology: In Two Volumes. Vol. 1: ...* Facsim. of ed. New York, Henry Holt, 1890. Dover-Books on Biology, Psychology and Medicine. New York: Dover, 1995.

³ Krathwohl, David R, Benjamin S Bloom, and Bertram B Masia. *Taxonomy of Educational Objectives: The Classification of Educational Goals. Handbook 2, Handbook 2*, New York: Longman, 1964.

⁴ Piaget, Jean, and Margaret Cook. *The Origins of Intelligence in Children*. Madison, Conn.: International Universities Press, 1998.

⁵ Knowles, Malcolm S. *The Modern Practice of Adult Education: From Pedagogy to Andragogy*. Rev. and Updated. Englewood Cliffs, NJ: Cambridge Adult Education, 1980.