Ask divergent questions to encourage thought and discussion

Divergent questions have at least two or three—if not an unlimited number—of appropriate answers. These sorts of questions give students more possible ways to enter the discussion, and more freedom to be creative with their answers.

**DIVERGENT**

invites student participation

**CONVERGENT**

inhibits student participation

(Note: A convergent question can often be restated to become divergent.)

Just avoid being too open-ended ...

Questions such as “Does that make sense?” or “Any questions?” are generally not effective, and usually result in very little response from students. Try asking more focused questions about the material, and make sure questions have purpose.

Ask questions with a purpose

To generate good discussion, ask questions that challenge students to do more than recall facts. Get your students talking to one another about their understanding of a concept, applying ideas in new contexts, analyzing an issue, or evaluating a perspective. Here are some examples:

**TO CLARIFY**

- What do you think is the main issue?
- Is your basic point _____ or _____?
- Could you explain that further?
- Could you give me an example of that?

**TO PROBE ASSUMPTIONS**

- What are you assuming?
- What could we assume instead?
- Your reasoning depends on the assumption that _____ Why have you based your thinking on _____ rather than _____?
- Is it always the case? Why do you think the assumption holds here?

**TO QUERY THE QUESTION**

- Do we all agree that this is the question?
- What does this question assume?
- To answer that question, what other questions would we have to answer first?
- Can we break this question down at all?

**TO EXPLORE REASONS, EVIDENCE, & CAUSES**

- What are your reasons for saying that?
- By what reasoning did you come to that conclusion?
- What other information do we need to know?
- Is there good evidence for believing that?
- Is there reason to doubt that evidence?
- What do you think is the cause?
- How could we go about finding out whether that is true?
- What would convince you otherwise?

**TO PROBE IMPLICATIONS & CONSEQUENCES**

- What does that imply?
- When you say ______, are you implying ______?
- If that happened, what else would happen as a result?
- What effect would that have?
- If this is the case, then what else must be true?


For more on asking questions at different levels of complexity, see our handout on *Cognitive Complexity of Questions*.
Choose how you want students to respond

 Verbally

**Provide students with real time to think.**
Tell your students they’ll have a minute or two to formulate a response. Allow for the majority of students to have developed an idea before requiring a response.

**Provide conference time with peers.**
You could have students compare their thinking with a partner. (You might provide time for students to consider the prompt individually at first.) Then if you have time for whole-group reporting back, ask students to pull themes out from the collective ideas generated and record them on the board.

 In Writing

**Have students share responses with each other.**
You could have students trade papers with each other to kick off some sort of activity, perhaps pairing them up and asking them to respond to each other’s answer, or putting them in groups and asking them to formulate a group response to your question.

**Share student responses anonymously.**
After asking students to write down their thoughts, collect and randomly redistribute them. At that point everyone has something to share, that they themselves did not write. Ask shy students to read what’s on their card and use the ideas presented as a basis for discussion.

**Establish an online exit or summary statement.**
If you really want to save class time, you can ask your students to respond to your question(s) in an online forum. Just make sure they see that their effort is worth it (e.g., lead a discussion on their responses during class time).

Try asking your question in writing.
This can be done on the board, on a handout, or the doc cam. It’s the most reliable way to make sure students consider your question in its entirety. It also allows students to refer back to the question as they formulate their response, to check that they are indeed answering the question put forth.

Ensure student thinking and success

What do your students need in order to respond? Be sure to provide them adequate support:

- **Scaffold questions.** Start with easier questions and ask progressively more challenging questions.

- **Offer clues.** Give additional prompts or invite students to use resources (e.g., “What do your notes say about that ...?”).

Uncover student thinking

If a student response is incorrect or off-track, it might be appropriate to uncover their thinking—especially if you suspect that other students have the same misconception. “Tell me how you got there, I’d like to understand where you’re coming from ...”