

Brookfield's CLOSE-UP

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Questions “Good for Nothing”

Linda Nilson (2010) argues that “some types of questions serve no purpose well and can confuse and alienate students” (p. 143). Below are the questions she says instructors should avoid.

Question Type	Description	Examples
Fuzzy questions	Questions that are too vague and unfocused for students to know how to approach them	“Who else knows what else doesn’t fall into this category?” “What about the breakdown of the family?” “Does everyone understand this?” “Any questions?”
Chameleon and shotgun questions	A series of weakly related questions, ranging in topical focus, that are fired off one after the other in hopes that one will hit with the students	“What did you think about the two plays? Did you like them? Did you like one more than the other? Did you have a favorite character? Do you see any common themes? What do you all think?”
Programmed-answer questions	Answers that sound like they are open-ended on the surface, but the instructor presents them with one specific answer in mind	“If the patient does not follow the doctor’s orders, what could happen?”
Put-down questions	Questions that imply students ought to know the answer or shouldn’t have any more questions	“Now that I have explained this topic thoroughly, are there any more questions?”
Ego-stroking questions	Questions that assume superiority of the instructor, to the discouragement of the students	“Please rephrase your answer the way I would say it.”
Dead-end questions	Quiz-show questions with a “yes” or “no” answer; students simply place their bets	“Does four plus four equal eight?” “Did the American Civil War start in 1861?”

Questions by Cognitive Level

In order to ensure your questions are scaffolded from lower to higher cognitive levels, it is useful to plan your questions before class. Use this table, from Linda Nilson, to identify appropriate question types for each cognitive level.

Cognitive Level	Questions
Knowledge	<ul style="list-style-type: none"> Who did _____ to _____? What did you notice about _____? What do you recall about _____? What does the term _____ mean? When did _____ take place? Where did it take place? How does the process work? (Describe it.)
Comprehension	<ul style="list-style-type: none"> In your own words, what does the term _____ mean? How would you explain _____ in nontechnical terms? Can you show us what you mean? What do you think the author/researcher is saying?
Application	<ul style="list-style-type: none"> What would be an example of _____? How would you solve this problem? What approach would you use? How would you apply _____ in this situation?
Analysis	<ul style="list-style-type: none"> How are _____ and _____ alike? How are they different? How is _____ related to _____? What are the different parts of _____? What type of _____ is this? How would you classify it? What evidence does the author/researcher offer? How does the author/researcher structure the argument? What assumptions are behind the argument? What inferences can you draw about _____?
Synthesis	<ul style="list-style-type: none"> What conclusions can you come to about _____? What generalizations can you make about _____? How would you design (structure, organize) a _____? How would you adapt (change) the design (plan) for _____? How can you resolve the differences (paradox, apparent conflict)? What new model could accommodate these disparate findings?
Evaluation	<ul style="list-style-type: none"> What would you choose, and why? What are the relevant data, and why? Why do you approve or disapprove? Why do you think the conclusions are valid or invalid? What is your position (opinion), and how can you justify it? How would you rank (rate, prioritize) the _____? How would you judge (evaluate) _____?

Suggestions for Using Socratic Questioning

When using Socratic Questioning in your classroom, you may want to try the following:

- Plan your questions in advance. Consider the different directions in which the discussion may go and think about how you will word and sequence your questions.
- Provide an overview of Socratic Questioning in advance, so students know you will only be asking questions.
- Review a sample transcript of Socratic Questioning with students ahead of time, so they can become familiar with the nature and sequencing of questions. You might also try modeling a session of Socratic Questioning with one student (planned in advance) to introduce your class to the format.
- Think aloud for students as you lead the discussion, and ensure that any confusion is clarified (Paul & Elder, 2006).
- Regularly pause to summarize the discussion.

Using Socratic Questioning in Online Discussion Forums

Instructors can design discussion forums to engage students in a Socratic questioning process to help them grapple with and build understanding of complex topics or readings. Below is a recommended process.

1. **Choose an appropriate text.** Assign a challenging article or set of resources aligned to a module focused on a key and complex topic.
2. **Explain the purpose and process of Socratic questioning forums.** Since most discussion forums include discussion questions or prompts, it is important to explain to students how Socratic questioning differs and why it is a useful process for their learning. For example,

Next week, we are going to discuss a challenging article written by one of the founding fathers of modern epidemiology, John Snow. This article, “On the Mode of Communication of Cholera,” discusses his work tracing the source of a cholera outbreak in London in 1854. To help us understand Snow’s process and influence on our current practices in modern epidemiology, we are going to spend the week engaging in a Socratic questioning process. My role in this process is to ask you questions that lead you to developing a deeper understanding of Snow’s process and links to modern practices. To give you an idea of what to expect, I’ve posted a list of the types of questions I will be asking as we move through the module.

Over the weekend, you will read the article and reply to the first set of questions in the discussion forum on Monday. After I read all of your responses, I will synthesize, clarify, summarize your ideas, and then pose a second set of questions on Tuesday. And finally, on Friday I will ask you to build on your previous responses and delve deeper.

3. **Design question forums.** To allow time for all students to think deeply and participate fully, divide the Socratic questioning discussion into three separate discussions, and pace them throughout the week/module. Set up the discussion forums to require students to post a response before being able to view other responses.

Socratic Forum #1 (Monday): Ask questions that focus on factual knowledge and clarify basic understanding. For example,

- *Why did John Snow write this article?*
- *What process is he recommending?*
- *What evidence does he provide to support his recommended process?*

Follow up: After reading all responses, submit a final post synthesizing and clarifying ideas.

Socratic Forum #2: Based on responses from the first forum, pose a second set of questions focusing on relevance, accuracy, or other question stems (refer to the Planning Guide on Nilson's Question Stems) designed to build on the foundational level of understanding from Socratic Forum #1. For example,

- *What similarities and differences were there in Snow's process of identifying the source of Cholera and the process we read about last week in discovering the source of the Ebola outbreak in 2014?*

Follow up: After reading all responses, submit a final post synthesizing and clarifying ideas.

Socratic Forum #3: Refer back to Forum #2 responses; ask questions that focus on assumptions, viewpoints, or question stems designed to move students beyond Socratic Forum #2. For example,

- *Several of you commented that there were errors made while tracing the Ebola outbreak due to faulty assumptions. How did Snow's assumptions and line of reasoning differ from the predominant logic of the time?*

Follow up: After reading all responses, submit a final post synthesizing and clarifying ideas.

Developing Students' Questioning Skills Online

In an online learning environment, asking good questions helps students contribute to interesting and meaningful online discussions and provides instructors with insights into students' understanding of course concepts.

Below are two online discussion forum activities designed to develop students' critical thinking and effective questioning skills. For these or similar activities, it can be helpful to provide students with resources such as question stems and examples of thoughtful questions.

CLOSE-UP Online. This activity provides students with practice asking each other thoughtful questions while also helping students think more deeply about course content.

Instructions to students:

1. Please complete your responses to the discussion questions related to this week's assigned reading.
2. After you post your responses, you will be able to read responses from your peers. Your assignment is to read the responses your peers have posted and ask two of your peers a probing follow-up question. Your goal is not to stump them, but rather to see if you can develop a question that helps them think more deeply or consider their perspective in a new light. Please use the CLOSE-UP handout to help you develop your questions.
3. Complete this assignment by responding to two of the questions your peers posed to you.

Instructor: Monitor the discussion, and post to threads that require clarification or might benefit from deeper probing. At the end of the discussion, summarize main points, clarify concepts as necessary, and comment on the quality of the questions asked, modeling alternative ways to ask particular questions as appropriate.

"Just One Question" Forum. Provide students with a case study or real-world scenario with a challenging problem to solve, and divide the class into small groups of two to four students.

Instructions to students: You have been given a challenging problem to solve with very little information. In your small groups, generate a list of questions you need answered to solve the problem. I will only answer one question from each group; therefore, your group will need to choose the question that you believe, when answered, will be most helpful in solving the problem. Post your question to the full group discussion board.

Instructor: Reply to the posted questions. Ask students to use your responses to any or all of the group's questions in order to come up with a possible solution to the problem, and post it on the full group discussion forum. After students read each other's solutions, have them write a reflection responding to one or more of the prompts below including:

- *How does this activity relate to the real world?*
- *Which question do you think was most useful in solving the problem and why?*
- *In hindsight, what flaws do you see in your group's solution?*
- *What question would have helped you come up with a better solution?*
- *Which questions could have been asked differently to be more effective?*
- *What made a particular question more effective than others?*

Be sure to post your assessment of each group's solution.

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Source: S. D. Brookfield, personal interview, December 2015.