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Critical Thinking: The Art of Socratic Questioning, Part II By Linda Elder and Richard Paul

The last column introduced the concept of Socratic questioning, viewed from a critical thinking perspective. It then focused on the questions one can ask in analyzing reasoning: the purpose of the reasoning, the questions being asked, the information being used, the beliefs being taken for granted or assumed, the points of view embedded in the reasoning, the concepts guiding the reasoning, the inferences being made, and the implications of the reasoning.

This column focuses on questions that target the assessment of reasoning. It includes a checklist for Socratic questioning, which can be used to assess one's own questioning abilities or that of students.

A Taxonomy of Socratic Questions Based on Assessing Reasoning Questions that Target the Quality of Reasoning

Universal intellectual standards are the standards by which thinking is judged by educated and reasonable persons. Yet, most people are unaware of these standards. Standards include, but are not limited to, clarity, precision, accuracy, relevance, depth, breadth, logicalness, and fairness. Skilled thinkers explicitly use intellectual standards on a daily basis. They recognize when others or they themselves are failing to use them. They routinely ask questions specifically targeting the intellectual standards.

Following are some guidelines for assessing thinking, along with some questions routinely asked by disciplined thinkers, questions that can be used in a Socratic dialogue.

1. Questioning clarity. Recognize that thinking is always more or less clear. Assume that no thought is fully understood except to the extent one can elaborate, illustrate, and exemplify it. Questions that focus on clarity in thinking are:

- Could the thinker elaborate on the topic?
- « Could one provide an example or illustration of the point?
- The message conveyed is. Is this understanding correct?
- 2. Questioning precision. Recognize that thinking is always more or less precise. Assume that no thought is fully understood except to the extent that one can specify it in detail. Questions that focus on precision in thinking are:
- Could the thinker provide more details about that?
- Could the thinking be more specific?
- Could one specify the allegations more fully?

3. Questioning accuracy. Recognize that thinking is always more or less accurate. Assume that no thought is fully assessed except to the extent that one has checked to Documentation Center of Cambodia

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determine whether it represents things as they really are. Questions that focus on accuracy in thinking are:

- How could one check that to see if it is true?
- How could one verify these alleged facts?
- Is the accuracy of these data trustworthy given the questionable source?

4. *Questioning relevance.* Recognize that thinking is always capable of straying from the task, question, problem, or issue under consideration.

Assume that no thought is fully assessed except to the extent that one has ensured that all considerations used in addressing it are genuinely relevant to it. Questions that focus on relevance in thinking are:

• Does the support provided bear on the question? How is it relevant?

• Please explain the connection between supporting deliberation and this question focused on.

5. *Questioning depth.* Recognize that thinking can either function at the surface of things or probe beneath that surface to deeper matters and issues. Assume that no line of thinking is fully assessed except to the extent that one has determined the depth required for the task at hand (and compared that with the depth that actually has been achieved). To figure out whether a question is deep, determine whether it involves complexities that must be considered. Questions that focus on depth in thinking are:

- Is this question simple or complex? Is it easy or difficult to answer?
- What makes this a complex question?
- How are the complexities inherent in the question addressed?

6. *Questioning breadth.* Recognize that thinking can be more or less broad-minded (or narrow-minded) and that breadth of thinking requires the thinker to think insightfully within more than one point of view or frame of reference. Assume that no line of thinking is fully assessed except to the extent that one has determined how much breadth of thinking is required (and how much has, in fact, been exercised).

Questions that focus on breadth in thinking are:

- What points of view are relevant to this issue?
- What relevant points of view have been ignored thus far?

• Is an opposing perspective left unconsidered due to unwillingness to change a personal view?

• Have the opposing views been considered in good faith or only enough to find flaws in them?

• What is my ethical responsibility to look at the question from an economic viewpoint?

• What would be a liberal position on the issue? What would conservatives say?

The Art of Socratic Questioning Checklist

The following list can be used to foster disciplined questioning on the part of students. Students might take turns leading Socratic discussions in groups. During the process, some students might be asked to observe the students leading the discussion and then afterwards provide feedback using the following guidelines (which all students should have a copy of during the discussion).

1. Did the discussion leader respond to all answers with a further question?

(*Remember that the questioner is always required to respond to answers with another question. The questioner should not be giving his or her view.*)

Keeping Participants Focused on the Elements of Thought

1. Did the questioner make the goal of the discussion clear?

(What is the goal and desired end result of this discussion?)

2. Did the questioner pursue relevant information?

(On what information are comments based? What experience convinced the questioner of this?)

3. Did the questioner question inferences, interpretations, and conclusions where appropriate or significant?

(How did the questioner reach that conclusion? Explain the reasoning. Is

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there another possible interpretation?)

4. Did the questioner focus on key ideas or concepts?

(What is the main idea set forth? Please explain that idea.)

5. Did the questioner note questionable assumptions?

(What exactly is taken for granted here? Why?)

6. Did the questioner question implications and consequences?

(What is implied by,..? If people accepted this conclusion and then acted upon it, what implications might follow?)

7. Did the questioner call attention to the point of view inherent in various answers? *(What point of view is assumed? Is there another point of view deserving consideration?)*

8. Did the questioner keep the central question in focus?

(Exactly what issue is forwarded? Please explain it. Remember that the question under consideration is...)

9. Did the questioner call for a clarification of context when necessary?

(Provide more information about the situation that has given rise to this problem. What was going on in this situation?)

Keeping Participants Focused on Systems for Thought

1. Did the questioner distinguish subjective questions from factual questions, from those requiring reasoned judgment within conflicting viewpoints?

(Is the question calling for a subjective or personal choice? If so, make that choice in terms of personal preferences. Or, is there a way to come up with a single correct answer to this question? Or, is it a question that would be answered differently within different points of view? If the latter, what is the best answer to the question, all things considered?)

2. Did the questioner keep the participants aware of alternative ways to think about the problem?

(Is there another way to think about this problem?)

Keeping Participants Focused on Standards for Thought

1. Did the questioner call for clarification, when necessary?

(*Please elaborate further or provide an example or illustration of the point? My understanding is. Is my interpretation correct?*)

2. Did the questioner call for more details or greater precision, when necessary?

(Please provide more details about that. Can allegations be specified more fully?

3. Did the questioner keep participants sensitive to the need to check facts and verify the accuracy of information?

(How could validity be checked? Are alleged facts verifiable?)

4. Did the questioner keep participants aware of the need to stick to the question on the floor; to make sure their "answers" were relevant to the question being addressed at any given point?

(How does that bear on the question? Explain the connection.)

5. Did the questioner keep participants aware of the complexities in the question on the floor? Did the questioner ask participants to think deeply about deep issues?

(What makes this a complex question? How does the answer take into account the complexities in the question?)

6. Did the questioner keep participants aware of multiple points of view when dealing with broad questions? (It's important to look at the question from an economic point of view and also from an ethical point of view. What would liberals and conservatives say on the issue? We have considered what you think about the situation, but what would your parents think?)

Keeping Participants Actively Engaged in the Discussion

1. Did the questioner think aloud along with the participants?

2. Did the questioner allow sufficient time for the participants to formulate their answers?

3. Did the questioner ensure that every contribution was sufficiently dealt with in some way?

4. Did the questioner periodically summarize where the discussion was in accomplishing its agenda? What questions had been and what questions had not yet been answered?

5. Did the discussion proceed smoothly with the various contributions being effectively blended into an intelligible whole?

Conclusion

This column has focused on some of the specific questions instructors and students can ask in understanding, analyzing, assessing, and probing thinking. The next few columns will continue providing avenues for effective Socratic questioning utilizing critical thinking concepts and principles.

Though the strategies we mention in this column are imminently practical, it is important to recognize that the development of Socratic questioning abilities occur, in so far as they do, over extended periods of time and through dedicated commitment to practice. Moreover, the development of these skills presupposes a relatively deep understanding of the critical thinking theory that underlies good Socratic questioning methods.

Socrates himself spent a lifetime developing his skill in asking deep and fruitful questions. At the end of his life, he would, no doubt, have said he was only just beginning to understand the art of questioning.

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