Socratic Method: asking good questions that promote thoughtful and relevant responses

Adapted in part from a Powerpoint presentation to EMS tutors in May 2012 by Megan Bam, and in part from pages published on Criticalthinking.org and the University of Carleton’s Geoscience Department website.

What is the Socratic Method?

Named for the famed Greek philosopher Socrates (470-399 B. C.), a Socratic approach to teaching is based on the practice of ‘disciplined, rigorously thoughtful dialogue’. In brief, the lecturer claims to know very little about the topic under discussion in order to draw students into a thoughtful and thought-provoking discussion that will engage them in thinking through their own ideas and responses to the topic, and to what they have been learning in the course. The overall aim of using the Socratic method of questioning students and eliciting their responses and engagement is based on Socrates’ idea that the ‘disciplined practice of thoughtful questioning enables the scholar/student to examine ideas logically and to be able to determine the validity of those ideas’. This approach is sometimes also called the ‘dialectical approach’ and because it allows students and teachers to identify and correct misconceptions and misunderstandings, it can lead to reliable knowledge construction, and also promotes more independent thinking.

Why is it effective in teaching and learning?

According to the Carleton University:

Socratic questioning helps students to think critically by focusing explicitly on the process of thinking. During disciplined, carefully structured questioning, students must slow down and examine their own thinking processes (i.e., reflective thinking). Thoughtful, disciplined questioning in the classroom can achieve the following teaching and learning goals:

- Model scientific practices of inquiry
- Support active, student-centered learning
- Facilitate inquiry-based learning
- Help students to construct knowledge
- Help students to develop problem-solving skills
- Improve long-term retention of knowledge (http://serc.carleton.edu/introgeo/socratic/third.html)

This approach may seem simple, but it is in fact quite rigorous to manage successfully in practice. The lecturer or tutor needs to feign ignorance about the topic under discussion so that students have to contribute fully to the conversation, and in so doing actively construct and critique and think carefully about the knowledge they are using. If the teacher steps in and starts giving them the answers, the process of getting students to question their own ideas and think about their knowledge in a more disciplined and rigorous way is somewhat defeated.

This method is effective in teaching and learning because it promotes more active learning; it focuses on what students are doing and asks them to engage in their own learning and thinking, rather than treating them as passive receivers of knowledge; it takes some of the pressure off the lecturer or tutor to have ‘all the answers’ and asks students to take responsibility for coming up with the answers; and it develops graduate attributes that speak being inquiry-focused and knowledgeable, being skilled communicators and having a critical attitude towards knowledge.
**How to ‘do’ Socratic questioning**

Teachers Engaged in a Socratic Dialogue with their students should try to:

- Respond to all answers with a further question (that calls upon the respondent to develop his/her thinking in a fuller and deeper way)
- Seek to understand—where possible—the ultimate foundations for what is said or believed and follow the implications of those foundations through further questions
- Treat all assertions as a connecting point to further thoughts
- Treat all thoughts as in need of development
- Recognize that any thought can only exist fully in a network of connected thoughts. Stimulate students — through your questions — to pursue those connections
- Recognize that all questions presuppose prior questions and all thinking presupposes prior thinking. When raising questions, be open to the questions they presuppose. (See the section on logically-prior questions.) ([http://www.criticalthinking.org/pages/the-role-of-socratic-questioning-in-thinking-teaching-learning/522](http://www.criticalthinking.org/pages/the-role-of-socratic-questioning-in-thinking-teaching-learning/522))

These are some useful tips from CriticalThinking.org on how to prepare a Socratic discussion using an example from History. The basic principle is to work back from the big or main question you want your students to answer to develop smaller, leading questions that help them to systematically work through a thinking process that will lead to greater and deeper understanding on their part, and ability to communicate their thinking and knowledge more effectively.

**From CriticalThinking.org:**
To construct a list of prior questions, simply write down the main question which you are going to focus your discussion on and then pose a question you would have to be able to answer before you could answer the first. Then take the second question and do the same for it (i.e., determine what question you would have to answer to answer it). Then, continue on, following the same procedure for every new question on your list. As you proceed to construct your list keep your attention focused on the first question on the list as well as on the last. If you do this well, you should end up with a list of questions which probe the logic of the first question, and hence, a list of questions which are relevant to a Socratic discussion of your first question. During the Socratic dialog, you should loosely follow your list of logically prior questions, using it primarily as a guide for deeply probing the issue at hand.

**A Sample List**
As an example of how to construct logically prior questions, consider this list of questions that we developed in thinking through a key question intended for use in conducting a Socratic discussion on the question, “What is history?”

- What is history?
- What do historians write about?
- What is the past?
- Is it possible to include all of the past in a history book?
- How many of the events during a given time period are left out in a history of that time period?
- Is more left out than is included?
- How does a historian know what to emphasize or focus on?
- Do historians make value judgments in deciding what to include and what to leave out?
- Is it possible to simply list facts in a history book or does all history writing involve interpretations as well as facts?
- Is it possible to decide what to include and exclude and how to interpret facts without adopting a historical point of view?
- How can we begin to judge a historical interpretation?
- How can we begin to judge a historical point of view?

Perhaps you can think about how these questions could be ordered differently or how this example could be adapted to fit into your content knowledge or course.

**Examples of Socratic-type questions**

<table>
<thead>
<tr>
<th>Questions for clarification</th>
<th>Why do you say that? How does this relate to our discussion?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Questions that probe assumptions</td>
<td>How can you verify or disapprove that assumption?</td>
</tr>
<tr>
<td>Questions that probe reasons &amp; evidence</td>
<td>What would be an example?</td>
</tr>
<tr>
<td>Questions about Viewpoints &amp; Perspectives</td>
<td>What would be an alternative?</td>
</tr>
<tr>
<td>Questions that probe implications &amp; consequences</td>
<td>How does...tie in with what we learned before?</td>
</tr>
<tr>
<td>Questions about the question</td>
<td>What was the point of this question? What does...mean? How does...apply to everyday life?</td>
</tr>
</tbody>
</table>

For useful web-based resources, including the two referenced here please consult the ‘Resources’ on the Teaching and Learning website, located under ‘General Pages’.