# Move Over Socrates:
# Online Discussion is Here
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Objectives:

- Identify the characteristic elements of critical thought
- Describe the features of online discussion that support critical thought
- Explore the role of the instructor in facilitating successful online discussions

Summary:

Critical thinking has been defined in various ways by various scholars. Perhaps the most complete definition in recent literature comes from Michael Scriven and Richard Paul. "Critical thinking," they say, "is the intellectually disciplined process of actively and skillfully conceptualizing, applying, analyzing, synthesizing, and/or evaluating information gathered from, or generated by, observation, experience, reflection, reasoning, or communication, as a guide to belief and action" (2001).

Typically, a student involved in critical thinking will:

- Relate ideas to previous knowledge and test theory against experience
- Look for patterns and underlying principles
- Check evidence and relate it to conclusions
- Examine logic and arguments critically and question assumptions
- Acknowledge alternative perspectives and construct counterarguments
- Identify bias and generalizations
- Seek or provide clarification and build consensus through cooperation
- Employ active problem-solving skills

**Threaded discussion and critical thought:**

Discussion, online or face-to-face, supports all these goals. Discussions allow complex issues to be analyzed and dissected from many points of view through a free exchange of ideas. Through discussion, a group can draw upon a larger pool of meaning than can be accessed by individuals. Participants in a discussion don't compete to find the right answer, but rather collaborate in a process of evolution and development. While a discussion may converge on a consensus, it may also lead to divergent conclusions that yield a deeper understanding of the topic.

There's nothing new here. This is simply the Socratic method brought forward to a new environment. A key advantage of online discussions, however, is that they make the Socratic method scaleable by facilitating its implicit reciprocity and inquiry.

*Online discussions:*

- Overcome barriers of time and space
- Provide a risk-free environment that encourages a frank exchange
- Minimize the potential for confrontation
- Neutralize status indicators and social distractors
- Broaden the range of feedback by incorporating peer-to-peer exchange

Through threaded discussion, faculty can incorporate a level of productive interaction into their classes that would otherwise require prohibitive amounts of time and attention. If carefully crafted, these discussions can involve students in critical thinking exercises that expand their horizons and deepen their understanding.

**Facilitating threaded discussions that encourage critical thought:**

Three conditions are necessary for critical thought to occur in a threaded discussion:

- The instructor must skillfully facilitate the discussion.
- All participants must suspend, or at least acknowledge, their assumptions.
- All participants must regard each other as colleagues.

If the instructor is skillful in his/her role, the other two conditions will follow.

When you engage your students in a threaded discussion, remember that *you are the model.* You must foster, by example, a continuous, dynamic negotiation with the topic. You can achieve this by projecting an explicit, well-communicated attitude of exploration and experimentation.

*A good facilitator:*

- Clearly communicates the purpose and expectations of the discussion
- Makes postings clear, concise, and informal
- Coordinates logistics and acts as a neutral member of the group
- Focuses the energy of the group on the topic and intervenes only when the discussion veers off-course
- Suggests alternative methods and procedures without judging conclusions
- Protects participants from intimidation and keeps individuals from dominating the exchange
- Encourages participation and constructive feedback

• Summarizes student positions and reinforces conclusions as they evolve
• Integrates the online discussion into in-class work

*A good facilitator encourages students to:*

• Ask probing questions
• Listen to each other
• Take turns and share work
• Help each other learn

• Respect each other's ideas
• Build on each other's ideas
• Construct conclusions
• Think in new ways

**Questions that encourage critical thought:**

The course of a discussion that fosters critical thought cannot be anticipated.  In order for critical thinking to occur, the exchange must be reciprocal and adaptive and therefore, to a certain extent, unpredictable.  It must encourage diversity and disagreement.  Risk, surprise, and spontaneity are the keys to success, and a skillful instructor will encourage open-ended questions and critical responses.

Questions and challenges that encourage students to clarify and explain their positions deepen their understanding of the topic by encouraging them to construct new knowledge. Questions based on fact or specific knowledge, on the other hand, may not contribute to an ongoing discussion, since, once they have been accurately answered, the discussion has nowhere to go.

*In order to encourage critical thought, questions should:*

• Require that students go beyond the facts
• Encourage students to recognize assumptions, implications, and consequences
• Generate more questions, rather than closing avenues of inquiry
• Hold students responsible for their views and conclusions
• Encourage students to interact critically with the content and with each other

The attached chart gives examples of Socratic question prompts that can be used to structure and direct discussions that encourage critical thought.  You can use this chart as a guide when creating and facilitating online exchanges.  You may also want to share it with your students and encourage them to use the questions as exemplars when responding to postings.

**Discussion formats that encourage critical thought:**

Threaded discussions that encourage critical thought share certain characteristics.  By structuring and directing your discussion with these characteristics in mind, you can ensure that your students will engage your content critically and reflectively.

*Some simple rules to follow:*

- Start where your students are; choose topics that relate to their knowledge level and experience
- Start with non-threatening topics that will not discourage participation
- Acknowledge the development of "group" personalities and dynamics
- Model diagnostic questions, appropriate comments, and prompt feedback
- Create scenarios that relate the topic to real circumstances
- Combine discussion with peer-editing activities to enhance collaboration
- Encourage students to view postings as "works in progress" rather than final products

*Sample formats:*

- Engage students in structured controversy by having them defend or challenge experts who disagree with the conventional wisdom.
- Quote contrasting views and ask students to respond. Encourage students to create postings in a word processor to avoid embarrassing spelling and grammar errors.
- Set up a scenario in which small groups each take on a role relevant to the topic and then react to the topic according to that role.
- Set up three groups. Ask two of them to "debate" an issue while the third mediates the debate. Require that the teams formulate their ideas, defend their positions, and adjust their conclusions in accordance with the other teams' responses.
- Provide a case study and encourage analysis of the case. Use the "onion peel" method, revealing aspects of the case as the discussion progresses.
- Set up discussions in which the students are the moderators. Set up discussion partners who will post together, thus minimizing personal risk.
- Use discussions to "bookend" weekly class meetings. Begin the week with an exploratory thread; end the week with an analytical thread.
- Create "buzz groups" of only a few students each who informally discuss a topic via a private list or chat, then report out by posting to the larger "class" forum. Have the class critique the groups' conclusions.
- Assign portions of a topic to small groups, then post the aggregate solutions/conclusions for critique and discussion. Have the class analyze how the assumptions made by each group affect how the pieces of the solution come together.
- Engage a guest speaker to host a discussion, preferably someone who takes a controversial approach to your topic.

Research shows that threaded discussions built using these guidelines help develop problem-solving skills by encouraging students to formulate their ideas and test their conclusions (Johnson 1971). When students participate in carefully designed threaded discussions, they

become involved in the process of exploratory learning.  They interact with each other, share ideas, seek additional information, make decisions about the results of their deliberations, and present their findings to the entire class.  "This is a level of student empowerment that is unattainable," Slavin claims, "with a lecture format, or even with a teacher-led whole-class discussion"  (1990).

Resources:

Aronson, E. Blaney, et. al.  *The Jigsaw Classroom*.  Beverly Hills, CA: Sage
        Publications, 1978.  A useful discussion of the jigsaw technique, along
        with an analysis of its effectiveness.

Azevedo, Americ.  "Building a Conversation with 500 Students," *Syllabus
        Magazine*, July 2001, 10.  In a *Syllabus* case study, Azevedo relates how he involved
        500 students in an Introduction to Computers class in a productive online discussion.
        He presents an interesting insight into the advantage of vertical and horizontal sorting
        of discussion posts.

Billig, Shelley and Lorraine Sherry.  "Redefining a 'Virtual Community of
        Learners,'" *Tech Trends*, 46:1, 48-51.  This article explores the group dynamics of
        virtual communities and gives helpful hints on how to design an effective virtual
        learning space.

Brookfield, Stephen D.  *Developing Critical Thinkers:  Challenging Adults
         to Explore Alternative Ways of Thinking and Acting*.  San Francisco, CA: Jossey-
        Bass Publishers, 1988.  Brookfield gives a detailed analysis of the role of the
        facilitator in encouraging critical thinking.

Cohen, E. G.  "Restructuring the Classroom:  Conditions for Productive
        Small Groups," *Review of Research, Spring 1994*, 64:1, 1-35.
        Cohen presents an in-depth study of the conditions necessary to make the small-group
        model a successful classroom environment.

Costa, A. L. and P. W. O'Leary.  "Co-Cognition:  The Cooperative
        Development of the Intellect," in Davidson and Worsham (eds.), *Enhancing Thinking
        through Cooperative Learning*.  New York, NY: Teachers College Press, 1992.
        Although this entire book is a good resource for educators considering the
        cooperative learning model, Costa's chapter is particularly relevant to the design and
        implementation of discussion groups.

Johnson, D. W., et. al.   "Focused Discussion Pairs," in *Active Learning:*

*Cooperation in the College Classroom*.  Edina, MN: Interaction Book Company, 1991.  This chapter targets an interesting technique for structuring online discussion for maximum effect (5:12-5:13).

Mills, Daniel Quinn and Matthew Salloway.  "Web-Supported Interaction in an MBA Course," *Educause Quarterly*, Number 2, 2001, 56-59.  Quinn and Salloway relate their experiences moving instructor-student interaction online as a means to reserve the classroom for interaction with visiting lecturers.  They emphasize the utility of the model for developing critical thinking, task analysis, problem solving, and decision-making skills.

Paul, Richard.  *Critical Thinking: What Every Person Needs to Survive in a Rapidly Changing World.*  Rohnert Park, CA: Center for Critical Thinking and Moral Critique, 1990.  A serious overview of the impact of and need for critical thinking in the Western world.

_____.  *How to Teach through Socratic Questioning*.  Santa Rosa, CA: Foundation for Critical Thinking, 1996.  A thorough application of Socratic question prompts to online and traditional discussions.

Scarce, Rik.  "Using Electronic Mail Discussion Groups to Enhance Students' Critical Thinking Skills," *Technology Source,*  July 1997.  Scrace discusses the pros and cons of using e-mail in specific teaching scenarios.

Scriven, Michael and Richard Paul.  "Defining Critical Thinking:  A Draft Statement for the National Council for Excellence in Critical Thinking," 2001.  http://www.criticalthinking.org/university/defining.html.  A clear statement of the goals and process of critical thought.

Senge, Peter.  *The Fifth Discipline.*  New York:  Doubleday, 1990.  Senge presents a chapter that analyzes the differences between dialogue and discussion (240-243).

Slavin, R. E.  *Cooperative Learning: Theory, Research, and Practice*.  Englewood Cliffs, NJ: Prentice Hall, 1990.  Slavin discusses critical thought as an essential piece of the collaborative learning model.

Stuhlman, J.  "A Model for Infusing Technology into Teacher Training Programs," *Journal of Technology and Teacher Education,* 6(2/3), 125-139.  Stuhlman defines a model for maintaining teacher competencies in technology and encouraging them to integrate technology tools.