

How to Teach Critical Thinking

Twenty-One Strategies and Tactics for Teaching Critical Thinking

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The actual teaching of critical thinking is a function of many situation-specific factors: teacher style, teacher interest, teacher knowledge and understanding, class size, cultural and community backgrounds and expectations, student expectations and backgrounds, colleagues' expectations, recent local events, the amount of time available to teachers after they have done all the other things they have to do, and teacher grasp of critical thinking, to name some major factors. I here suggest some general strategies and tactics gleaned from years of experience, research, and others' suggestions. They are guidelines and must be adjusted to fit the actual situation.

Underlying Strategies

(The three underlying strategies are “**R**eflection, **R**easons, **A**lternatives” (**RRA**):

1. Urge students to be **R**eflective, to stop and think, instead of making snap judgments, or accepting the first idea that comes into their heads, or automatically accepting whatever is presented in the media.
2. Gently ask such questions as “How do you know”, “What are the reasons?” and “Is that a good source of information?” thus prodding them to have good **R**easons for their views and to seek reasons for others' views.

3. Emphasize alertness for Alternative hypotheses, conclusions, explanations, sources of evidence, points of view, plans, etc.

Fundamental Strategies

4. Use a defensible conception of critical thinking with which you feel comfortable.

5. Provide for many guided opportunities in varied contexts for students to practice critical thinking in application of critical thinking principles to examples, including a number of opportunities in realistic situations that they see as significant.

6. More specifically, where transfer is desired, teach for the transfer of critical thinking principles to everyday life and to other subjects by giving much practice with examples, some of which call for transfer. Call students' attention to how the critical thinking principles and criteria apply in a transfer situation, and if feasible, arrange for students to practice transfer applications.

7. Sometimes ask the question, "Why?", when you agree with your students, as well as when you don't — and when you are unsure yourself — or are trying to find out what they mean. "Why?" is sometimes threatening, but is the most concise way to draw out the reasons. A less aggressive question is, "Would you say a little more about that?"

8. Emphasize their seeing things from others' points of view and being open minded — including being willing to reconsider, if other reasons and evidence arise.

9. Assess what is important in critical thinking using tests or other assessment procedures that are sufficiently valid and reliable in the situation; except for special circumstances, incorporate the results in the course grade and/or any other report that matters to the students; and discreetly make sure that students are aware of this incorporation. Lastly, make sure that the assessment procedure fits the critical thinking instruction; this often requires thinking about assessment well in advance of its use.

10. Students do not need to become subject-matter experts before they can start to learn to think critically in a subject. These things can proceed together, each helping the learning of the other. Students will remember best the subject matter they use (e.g., in making decisions). But ultimately, of course, being well informed and familiar with the topic and the situation calling for critical thinking are essential for critical thinking.

11. In a subject-matter course, the time required for infusion of critical thinking is often justified, not only for the critical thinking learned, but also for an enhanced deeper understanding of the subject. (Consider how much you have retained of the subject matter to which you were exposed as a student in lecture courses compared with seminars calling for reflective participation.)

12. “Infusion” here refers to the embedding of critical thinking in subject-matter instruction that ensures that the principles of, and criteria for, critical thinking are explicit, whether stated by students or the teacher. “Immersion” refers to the embedding in which critical thinking principles are not made explicit by anybody. Of course some cases lie in between. Infusion in subject-matter instruction is more likely to succeed than immersion because knowing principles promotes learning, whether it be learning to think critically in the subject (in subject-specific instruction), or transferring critical thinking learning to other subjects or everyday life.

Tactics

13. Sometimes ask students to address questions to which you do not know the answer, or that are controversial. The question should seem significant to them and be interesting.

14. Give them time to think about questions and situations. If you wait long enough, someone will offer an answer. In other words, provide “wait time”.

15. In a discussion, label a student’s statement (or thought, answer, hypothesis, position, point, objection, question, etc.) with the student’s name, so that the student receives attention and assumes some responsibility. Write the statement on

the board, or screen. (Do not worry that you might be wasting time doing this. It gives students a chance to think about the statement or thought.) Invite them to help formulate what you write. Encourage them to speak to each other's positions, giving reasons. Provide wait time.

16. Have them write down their positions, giving reasons to support what they think, showing awareness of opposing positions and the weaknesses of their own positions. Limit the length to a few sentences, one page, or two or three pages, etc., depending on their maturity and the time available.

17. Provide a set of criteria for judging papers, reports, letters, proposals, or sentences in which they take positions. The criteria should reflect the critical thinking principles that you have been telling them are important.

18. Have them read each other's written statements or position papers, applying these criteria and making suggestions. Then get them to revise — and revise again, in the light of still other comments or further thought.

19. Have them work on issues or questions in groups, with each group reporting to the entire class, and each person showing the others what he or she has done. Students are eager to do well in the eyes of their peers (just like the rest of us).

20. Be ready to postpone an assignment, if the content of the previous assignment is not understood. Understanding, not coverage, is the goal.

Mid-level Strategies

21. To supplement the underlying strategies, “**RRA**”, urge mid-level students to use the following acronyms and their associated guidelines: “**FRISCO**” and “**SEBKUS**”.

FRISCO: When appraising a position, whether yours or another's, attend at least to these elements:

F for Focus: Identify or be clear about the main point, that is, the conclusion

R for Reasons: Identify and evaluate the reasons

I for Inference: Consider whether the reasons establish the conclusion, given the alternatives

S for Situation: Pay attention to the situation

C for Clarity: Make sure that the meanings are clear

O for Overview: Review your entire appraisal as a unit

SEBKUS: When doing appraisals and planning investigations and other actions, make full use of and try to expand your **Sensitivity, Experience, Background Knowledge, and Understanding of the Situation**. Critical thinking does not occur in a vacuum.

Overview

These strategies and tactics, as presented, are empty slogans and formulas unless thoughtfully implemented. In following any one, consider in advance what might happen, and how you might deal with it. Practice formulating involving questions like "How many agree?" "Why?" "Who thinks otherwise?" "Why?" "How can we settle this?" "What does this evidence tell us?" "Are there any alternatives?" "Can someone tell me what was going on?" "Write a short answer and exchange with your neighbor." "Together decide on an appropriate answer." "Present it to your local group." "Select the one that the group likes best and read it to us." "Were they thinking critically?" "Why?"

Be patient, but show that you are interested in their thoughts. Think about it afterwards, and consider what you would have done differently using SEBKUS.

Note: An earlier version of these twenty-one strategies and tactics is in Ennis (2011b, pp. 14-15).