

This newsletter is extracted from a piece previously published on Tomorrow's Professor, and is by Patricia Armstrong, Vanderbilt University; Sonja Moyer, US Army Command and General Staff College; Katherine Stanton, Princeton University.¹

Learning to Analyze and Critically Evaluate Ideas, Arguments, and Points of View

By encouraging our students to adopt a critical framework, we prepare them not only to engage in scholarly conversation and debate in our disciplines, but also to be engaged citizens in a democratic society. As Patricia King points out,

"a student who appreciates why people approach controversial issues in her discipline from different perspectives is more likely to see and appreciate the reasons people approach social controversies from different perspectives. By the same token, a student who evaluates knowledge claims in his major by reference to the strength of the evidence in support of conflicting hypotheses would also be more inclined to evaluate contradictory claims about current moral issues by reference to the weight of available evidence (King 2000, p. 23).

Helpful Hints

- In humanities and social science courses, keep the reading load manageable and model for students how to read critically and to evaluate arguments in your field (see [IDEA Paper #40 Getting Students to Read: Fourteen Tips](#)).²
- In math, sciences, and engineering courses, encourage students participating in study groups not only to share ideas for solving problems but also to provide reasons for the problem solving ideas they advance.
- Have students respond to an editorial in a newspaper or to a review essay in a scholarly journal. For that response, ask students to identify unstated assumptions, biases, and points of views and show how they undermine the argument the author is making.
- Teach students to use a pro and con grid to analyze ideas and points of view (Angelo & Cross 1993, see pages 168-171).
- Take time in science and engineering classes to explore the ethical considerations of research questions and experimental design.
- In organized class debates, ask students to argue for a point of view counter to their own.
- Give students "ill-structured problems" in class to work through. Such problems have no known answer or solution and cannot be solved with formal rules of logic or mathematical formulas. Ask students to come up with multiple solutions for each problem and rank the viability of each solution.
- Teach students the "believing and doubting game" (Elbow, cited in Bean 1996, p.142), which asks them to be both sympathetic and skeptical readers.
- Help students develop strategies for systematically gathering data according to methodologies in your discipline, assessing the quality and relevance of the data, evaluating sources, and interpreting the data (Bean 1996, p. 24).

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² Hobbs, E. (2004). "Idea paper #40. Getting students to read: fourteen tips." Idea. 1-10. Web. Retrieved from http://ideaedu.org/wp-content/uploads/2014/11/Idea_Paper_40.pdf

- Encourage students to enter into dialogue with the sources they read; encourage them to ask questions, give assent, or protest in the margins of what they read.
- Train students to identify the author's audience and purpose when they read.
- Encourage students to engage their critical reasoning skills outside of the classroom (Bean 1996, p. 24).

Assessment Issues

Angelo and Cross (1993) offer many techniques for assessing critical thinking, problem solving, analysis, and related skills. Echoing and expanding on their ideas, we make the following suggestions:

- Design a writing assignment that asks students to test a critic's ideas (or an everyday assumption) against a primary text or texts.
- Ask students to apply a theory they've learned in a social science class by designing an experiment to test the theory. Have them carry out the experiment and document the results.
- Design a writing assignment that prompts students to position themselves within a scholarly or real-life debate.
- Ask students to review a scientific paper, assessing the evidence the authors use and how they use it.
- Allow students to choose a current political issue relevant to a community to which they are attached. Have them research both major parties' point of view on this issue and critically analyze them. As a writing assignment or project, ask students to agree with one major party's stand on this issue and justify their choice.
- Have students use a double-entry journal for reflection and self-assessment of this learning objective, using guided questioning. The journal helps faculty to assess the affective domain, and helps students through possible "road blocks" in the process of learning to analyze and critically evaluate ideas, arguments, and points of view. It also reinforces that this process is ongoing, not just an assignment for a class. Sample guided questions include: What happened (when you analyzed and critically evaluated ideas, arguments, and points of view)? What was your reaction as you went through this process? What did you learn about yourself? How can you apply what you learned to your education or your life?
- Construct a rubric (i.e. scoring guide) to provide guidelines for critical analysis and evaluation so students know what to expect when they are assessed. The criteria and standards for this rubric may include the "Elements of Reasoning and Intellectual Standards" in Paul and Elder's *Critical Thinking* (2002).

References

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