

Critical Thinking

What's all the fuss about?

Jim Skypeck, MA, MLIS

What is critical thinking?

- Linda Elder and Richard Paul of the Foundation for Critical Thinking provide this working definition: critical thinking is the ability and disposition to improve one's thinking by systematically subjecting it to intellectual self-assessment." {Elder, L. with Paul R. (1996). At website: www.criticalthinking.org}

Evaluation of knowledge

- How do you know what you know?
- Where did you learn certain facts?
 - Parents?
 - Teachers?
 - Friends?
 - Printed material?
 - TV?
 - Online?
- Did you ever evaluate this information at a later date or time?
- If not, why not?
 - I don't know enough.
 - They're the experts so they must be right.
 - Never gave it much thought actually.

Evaluation criteria:

- Accuracy: is the information true, valid, and supported? Can you verify the information elsewhere?
- Authority: does the writer have the necessary credentials to support his/her findings or theory?
- Objectivity: is there bias and how explicit is it?
- Currency: how current is the information and is it still valid?
- Audience: for whom is the author writing? General public? Other Academicians?

Sample Sites for Evaluation

- <http://www.martinlutherking.org/>
- <http://www.whitehouse.net>
- <http://www.whitehouse.gov>
- <http://147.129.226.1/library/research/AIDSFACTS.htm>

Evaluating Arguments

- Arguments are composed of 3 parts: premise(s), reasoning, and conclusion.
- For example, the following statements are premises:
 - I am human.
 - All humans are mortal.
- The conclusion one draws from these premises is:
 - I am mortal.
- The reasoning is how I got from the premises to the conclusion: “if all humans are mortal and I am human, then I must be mortal!”

Evaluating arguments (ctd.)

- There are 4 primary principles to follow in evaluating arguments:
 1. Premises are either *true* or *false*.
 2. Reasoning that leads from premises to conclusion is valid or invalid.
 3. Correct premises plus valid reasoning equal a *sound* argument.
 4. Incorrect premises OR invalid reasoning render an argument *unsound*.

Sample arguments: sound or unsound?

- Guilty people fail lie detector tests.
 - Debbie failed her lie detector test.
 - Therefore, Debbie is guilty.
- The Bible tells me that Jesus loves me.
 - Everything the Bible tells me is true.
 - Therefore, Jesus loves me.

Elements of Research

- ALL RESEARCH:
 - has a purpose.
 - is intended to solve a problem or answer a question.
 - starts with assumptions.
 - is done from a specific point of view.
 - is based on data, information, or evidence.
 - is expressed and shaped by concepts and ideas.
 - contains inferences from which we draw conclusions.
 - has implications or consequences.
- (Richard Paul and Linda Elder, *The Miniature Guide to Critical Thinking: Concepts and Tools*. [Dillon Beach, CA: Foundation for Critical Thinking, 2001], 3-4)

Standards for Evaluating Author's Reasoning

- Clarity: is the author clear or is further explanation necessary?
- Accuracy: are the statements or claims true or should they be questioned? How can we verify?
- Relevance: are views discussed related to the issue or are they tangential?
- Precision: is the information provided specific or are there details missing?
- Depth: do the author's answers address the complexities of the question?
- Logic: do the author's arguments make sense? Do the conclusions follow from the information given?
- Breadth: does the author provide opposing viewpoints? Are other views considered?

Significance and Fairness

- Significance: is this the most important problem to consider? Should this be the central focus?
- Fairness: Do I have a vested interest in this issue? Is the author representing the views of others in an unbiased manner or only highlighting their weaknesses?

Reification and Alienation

- Peter Berger in his book, *The Social Construction of Reality*, discusses the concept of reification. In *The Sacred Canopy*, he addresses the idea of alienation.
- Reification is "...the apprehension of the products of human activity as if they were something else than human products - such as facts of nature, results of cosmic laws or manifestations of divine will. (Berger, TSCR, p.82)
- Alienation is being unaware of how much of our thinking is based on reification and how arbitrary it may be. We assume a common understanding of concepts which may or may not be accurate. Or, we may assume something is divine in origin when it is merely a human construct. (Berger, TSC, p. 85)

Errors in Thinking: A Sample

(See Ruggiero, pp. 124-129)

- Unwarranted Assumptions
 - Assumptions taken for granted rather than reasoned out.
- Either/or OR Black/White
 - No middle ground
- Mindless conformity
 - Adopting others' views without consideration.
- Absolutism
 - No exceptions to rules
- Relativism
 - All views are right.
- Double standard
 - Using different criteria for arguments you agree with and those with which you disagree.

Errors (ctd)

- Hasty conclusion
 - Premature judgments.
- Overgeneralization
 - Ascribing to all members what only fits some.
- Arguing in a circle
 - Repeating same arguments in different forms.
- Mistaken authority
 - Ascribing authority to someone who does not have it.
- Attacking the critic
 - Attacking the person rather than the idea or argument. These are also known as “ad hominem” attacks.

Checklist for Assessment

1. What are you assessing and why?
2. Ask probing questions such as: What is the author's thesis? How clear or valid are his/her arguments?
3. What information are you trying to gather from your sources? Information that supports what you already know or information that might challenge you?
4. What criteria are you using to evaluate your sources? Are you applying these criteria uniformly or consistently?
5. Make sure that you apply these evaluative criteria to your own work, insuring that you treat your own research as seriously as that of your sources.

References

- Berger, Peter. *The Sacred Canopy: Elements of a Sociological Theory of Religion*. New York: Doubleday, 1967.
- Berger, Peter. *The Social Construction of Reality: A Treatise in the Sociology of Knowledge*. Garden City: Doubleday & Company, 1966.
- McPeck, John E. "Critical Thinking and the 'Trivial Pursuit' Theory of Knowledge," in *Re-thinking Reason: New perspectives in Critical Thinking*, ed. Kerry S. Walters (Albany: SUNY Press, 1994).
- Paul, Richard W. "Teaching Critical Thinking in the Strong Sense: A Focus on Self-Deception, World Views, and a Dialectical Mode of Analysis," in *Re-thinking Reason: New perspectives in Critical Thinking*, ed. Kerry S. Walters (Albany: SUNY Press, 1994).
- Paul, Richard and A.J.A. Binker "Socratic Questioning" in *Critical Thinking: What Every Person Needs to Survive in a Rapidly Changing World*, ed. A.J.A. Binker and Richard W. Paul (Rohnert Park, CA: Center for Critical Thinking and Moral Critique, 1990)

References (ctd)

- Paul, Richard and Linda Elder. *Miniature Guide to Critical Thinking Concepts and Tools* (Dillon Beach, CA: Foundation for Critical Thinking, 2004).
- Penaskovic, Richard. *Critical Thinking and the Academic Study of Religion*. Atlanta, GA: Scholars Press, 1997.
- Petress, Ken. "Critical Thinking: An Extended Definition." *Education*, 124(3), 2004, 461-466.
- Ruggiero, Vincent Ryan. *Beyond Feelings: A Guide To Critical Thinking*. 6th Edition. Mount View, CA: Mayfield Publishing Co., 2001.
- <http://www.criticalthinking.org>.

THE END

- Slides will be added to the STH Library web site under “E-Resources—Tutorials”.
- Thank you for coming.
- Contact me at jrsky@bu.edu or 617-353-5357 with questions.