

***Beyond Course Content:  
Changing Hearts and Minds***

*Presented by:  
Critical Thinking  
Faculty Learning Community*

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***What is Critical Thinking?***

**Neil Browne** (and Stuart Keeley)  
■ *Asking the Right Questions*. 6th ed.

**Richard Paul**  
■ *Critical Thinking: How to Prepare Students for a Rapidly Changing World*.

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***Neil Browne***

*Critical thinking refers to the following:*

- Awareness of a set of interrelated critical questions.
- Ability to ask and answer critical questions at appropriate times.
- Desire to actively use the critical questions.

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### *The Right Questions*

- What are the issue and the conclusion?
- What are the reasons?
- Which words or phrases are ambiguous?
- What are the value conflicts and assumptions?
- What are the descriptive assumptions?

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### *The Right Questions*

- Are there any fallacies in the reasoning?
- How good is the evidence?
- Are there rival causes?
- Are the statistics deceptive?
- What significant information is omitted?
- What reasonable conclusions are possible?

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### *Richard Paul*

**Critical thinking is...  
thinking about your thinking  
while you're thinking  
in order to make your thinking  
better.**

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## *General Education Outcomes*

### *Critical Thinking*

- Evaluate the quality of arguments and evidence, and the accuracy of claims
- Evaluate the quality of statistical evidence
- Identify logical errors and fallacies
- Distinguish between facts, inferences, and opinions and value assertions
- Recognize alternative approaches and conflicting viewpoints.

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### *Communication*

- In a random survey last month of 470 members of the Sierra Club, 98 percent of those interviewed opposed drilling for oil in the Alaskan wilderness. Clearly then, the American people oppose such drilling.

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### *Communication*

- Select a topic and focus.
  - *(To inform my audience of the potential dangers of drinking from water fountains).*
- Generate a source that they would hope to find.
  - *(a statistic from the Health Department or testimony from a doctor).*
- Write a citation of that type.
- Exchange citations evaluate effectiveness.

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## *Communication Rubric Source Citations*

### **4 (Excellent)**

- Speaker specifically identifies sources of information and, when needed, explains the expertise/credibility of the source (e.g., "The March 27th edition of the New York Times quotes nuclear energy expert Adam White as saying...").

### **3 (Acceptable)**

- Provides general identity of source (e.g., "An article in the New York Times states").

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## *Communication Rubric Source Citations*

### **2 (Partial)**

- While speaker mentions that a source exists, s/he does not give any information about the source of information (e.g., "An expert on nuclear energy said..."). OR Student makes blanket citation of sources without further reference to them.

### **1 (Unacceptable)**

- Sources are not cited.

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