

How to Think Critically About Any Topic

Sylvia H. Branca

Lecturer, Department of Child and Adolescent Development (ChAD)

Introduction

Students across all majors and disciplines are required to think critically - they must reflect upon, analyze, critique, and evaluate information from textbooks and supplemental materials. Critical thinking serves many purposes: it helps organize our thinking, clarifies our knowledge of a given topic, promotes deeper analysis of a particular subject matter, and facilitates our evaluation of information from outside sources. Critical thinking is used in many disciplines (e.g., education, science, business, health care, etc.). The skills and strategies presented in this lesson can be applied to any topic or assignment that requires students to evaluate information in a critical fashion.

Objectives

The goal of this lesson is to introduce students to the concept of critical thinking and give students practice engaging in this vital process. This lesson will identify common obstacles to critical thinking and outline strategies students can use to overcome them. This lesson will include a discussion about the reasons why critical thinking is important for students' success in college and beyond (e.g., in the work force or in graduate school) and emphasize that while everyone can engage in critical thinking, as with many endeavors, one must practice this technique to get good at it.

Steps/Procedure

Introduce to students the key practices that are central to the critical thinking process. Tell students that you would like them to imagine they have some information in front of them that they must read (e.g., textbook chapter, opinion piece, research article). Tell students they can apply the critical thinking process to issues pertaining to almost any subject matter.

Assess: read information and begin to summarize main points; synthesize the information into a cohesive whole, begin to identify patterns or main ideas emerging and begin to evaluate the information presented

Examine: think deeply about what you are reading; consider alternative explanations for conclusions made by the author; decide whether information is sound; does it make sense? What questions do you have about what you have read? What other ideas (alternative explanations) come to your mind when you think about the information you are reading?

Reflect: pause and take a moment to step back and view the big picture; think about what you've just read, how you've analyzed it, and what questions you may have forgotten to ask yourself; begin to form a judgment about what you have read, decide whether you agree or disagree with what you have read and why

Practice: find opportunities to think critically in your daily life; listen to news stories or read news headlines and ask yourself questions such as "How do they know?", "Who is making this claim?", "What qualifies them to say this?", "Does what they are saying make sense", "What evidence are they using to support their claims?", "Do I agree with what they are saying?", "Why or why not?"



Analysis

One of the strengths of this lesson is that it incorporates student feedback and builds on students' self-reported experiences. By asking students to discuss their own obstacles to critical thinking (e.g., challenges they may have faced in trying to demonstrate critical thinking in writing assignments in the past) and by addressing these obstacles directly, this lesson seeks to relate content to students' real-world experiences. When students feel material is relevant to their own lives and is useful for their immediate needs, they may be more motivated to engage in class discussions and openly share their unique ideas and perspectives. By using pair-share, group discussion, and standard lecture format, this lesson provides students the opportunity to learn the material via multiple learning modalities. This lesson also utilizes a two-way approach to teaching. At multiple points in the lesson, students are asked to provide their feedback and the instructor incorporates this feedback to highlight (or in some cases contrast) pre-determined lesson content.

"It is the mark of an educated man to be able to entertain a thought without accepting it."

-- Aristotle

*"I want to put a *ding* in the universe."*

-- Steve Jobs

Critical Thinking Is Not Simply...

[Not] Opinion: Critical thinking is not simply stating your opinion; it involves reading information and evaluating what you read; it involves supporting your statements with evidence or facts or logical conclusions and rationale

[Not] Repetition: Critical thinking is not simply repeating what others have said; it is finding your own voice, thinking through your own ideas, following your own thinking process

[Not] Definition: Critical thinking is not defining terms or describing what things mean; it is a thoughtful *analysis* of a topic or idea based on reflection and deep consideration, it is not memorization and regurgitation of subject matter

[Not] Effortless: Critical thinking is not easy; it does not have to take an inordinate amount of time but it does require mental effort (think: the brain with the barbell) and does require you to stop, think, reflect, analyze, critique

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