What is Critical Thinking?

A **layperson definition** is that Critical Thinking is looking at things **wider** and **deeper**. Let's take the example where a developer has proposed an industrial wind facility for your community. They say that in your community's decision-making process the only consequential considerations are: **a)** it will be a financial windfall for the community, *and* **b)** it will be helpful in saving the planet.

Looking at this more **broadly** we find out that there are *other* major considerations not mentioned by the developer: **c)** health impact on proximate citizens, **d)** environmental impact, **e)** impact on a nearby military base, etc.

Looking **deeper** into the developer's claims we find that his calculation of a local financial windfall does **not** take into account any negatives — like home devaluations, agricultural losses (due to bat deaths), tourism drop, etc. An objective and comprehensive net economic calculation turns out to be **negative**.

Critical Thinking is necessary to make a more informed decision!

The **academic definition** (substantially condensed from here) is that Critical Thinking is the intellectually disciplined process of skillfully synthesizing, conceptualizing, and evaluating information, as a guide to belief and action.

It entails the examination of those elements of thought implicit in all reasoning: purpose, problem, or question-at-issue; assumptions; concepts; empirical grounding; reasoning leading to conclusions; implications and consequences; objections from alternative viewpoints; and frame of reference.

Critical thinking can be seen as having two components: **1)** a set of information processing skills, *and* **2)** the habit, based on intellectual commitment, of continually using those skills (grounded in fair mindedness and intellectual integrity) to guide behavior.

Despite good training and best intentions, no one is a critical thinker 100% of the time, as everyone is subject to episodes of undisciplined or irrational thought.

One's level of critical thinking quality is a matter of degree, and dependent on factors like attentiveness, commitment, interest in objectivity, etc. with respect to particular issues. For this reason, the development of critical thinking skills and dispositions is a life-long endeavor.

This **Report** goes into a more detailed discussion of Critical Thinking.

Some parties seem to think that the **Scientific Method** and **Critical Thinking** are synonymous — but that is not so. These two powerful mental tools definitively have some overlaps, but they should be looked at as being *complementary*. A superior explanation is found <u>here</u>. A particularly relevant part is this:

"Dewey, who also used the term *reflective thinking*, connected Critical Thinking to a tradition of rational inquiry associated with modern <u>science</u>. From the turn of the 20th Century, he and others working in the overlapping fields of <u>psychology</u>, <u>philosophy</u>, and educational theory sought to rigorously apply the <u>Scientific Method</u> to understand and define the process of thinking.

"They conceived Critical Thinking to be *related* to the Scientific Method but **more open**, **flexible**, and **self-correcting**; instead of a recipe or a series of steps, Critical Thinking would be a **wider set of skills**, **patterns**, and **strategies** that allow someone to reason through an intellectual topic, constantly reassessing assumptions and potential explanations in order to arrive at a sound judgment and understanding."

Another excellent discussion about the distinctions between these two, is found in: "What's the Difference Between Critical Thinking and Scientific Thinking?"

This *classroom application* shows that Critical Thinking and the Scientific Method are **not** synonymous, but instead work hand-in-hand: "The Scientific Method: Critical Thinking at its Best."

The "Guide To Inductive and Deductive Reasoning" outlines a rarely discussed distinction of reasoning (*inductive* and *deductive*), and connects them with Critical Thinking and the Scientific Method.

11-22-23