

# CRITICAL THINKING: THE ABILITY TO THINK CLEARLY AND RATIONALLY\*

DIVAKARA NAIK K S

“Education is not the learning of facts, but the training of the mind to think.”

- Albert Einstein

## ABSTRACT

*Critical thinking is the intellectually disciplined process of actively and skillfully conceptualizing, applying, analyzing, synthesizing, and/or evaluating information gathered from, or generated by, observation, experience, reflection, reasoning, or communication, as a guide to belief and action. In its exemplary form, it is based on universal intellectual values that transcend subject matter divisions: clarity, accuracy, precision, consistency, relevance, sound evidence, good reasons, depth, breadth, and fairness. It entails the examination of those structures or 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. We understand critical thinking to be purposeful, self-regulatory judgment which results in interpretation, analysis, evaluation, and inference, as well as explanation of the evidential, conceptual, methodological, criteriological, or contextual considerations upon which that judgment is based. CT is essential as a tool of inquiry. As such, CT is a liberating force in education and a powerful resource in one's personal and civic life. While not synonymous with good thinking, CT is a pervasive and self-rectifying human phenomenon. The ideal critical thinker is habitually inquisitive, well-informed, trustful of reason, open-minded, flexible, fair-minded in evaluation, honest in facing personal biases, prudent in making judgments, willing to reconsider, clear about issues, orderly in complex matters, diligent in seeking relevant information, reasonable in the selection of criteria, focused in inquiry, and persistent in seeking results which are as precise as the subject and the circumstances of inquiry permit. Thus, educating good critical thinkers means working toward this ideal. It combines developing CT skills with nurturing those dispositions which consistently yield useful insights and which are the basis of a rational and democratic society.*

**Key words:** CT: Critical thinking.

## INTERDUCTION:

‘Critical thinking’ allows individuals the ability to think clearly and rationally and these skills are important for whatever one chooses to do in life. If one decides work in medicine, marketing, education or the legal profession, then critical thinking is clearly significant. Critical thinking skills are not limited to a specific subject area. Individuals who are able to think well and solve problems systematically have an asset that is valuable for any career, as well as survival in society, and making strides towards creating a critical society. Critical thinking is the ability to think rationally, and analyzing all options before making a decision. It involves using logical, organization of information, from various sources. When using critical thinking for analyzes, the issue should be clearly recognized. Information regarding the issue is gathered from all sources to learn more, and try to determine its origination. Once the evidence is collected, the sources need to be analyzed for prejudices. The conclusions drawn, should be based on the evidence, and provide alternate solutions. The information can be analyzed by oneself, or in a group where everyone gives their input. Once a method of how to rectify the problem is agreed upon, the goal should be pursued by all involved. Measures will need to be implemented to ensure that the method is on track to meet the goal. If any measure fails, the method should be revised to handle that exception. Active reading is a method used for critical thinking. When assessing written information, the reader should not be distracted. The reader should take their time to understand the context of the information. Evidence should be summarized, to retain the important components of the information. Thoughts and information can be in written or verbal forms. Verbal information should be written for better analyzes. It is easier to map and categorize written information. However, don't solely rely on the written format of the verbal information, as the tone of verbal information also carries evidence.

**MEANING AND DEFINATIONS:** The word “critical” derives etymologically from two Greek roots: "kriticos" (meaning discerning judgment) and "kriterion" (meaning standards). Etymologically, then, the word implies the development of **“Discerning judgment based on standards.”**

- **Dewey explicitly uses the term** “Critical thinking”: The essence of critical thinking is suspended judgment; and the essence of this suspense is inquiry to determine the nature of the problem before proceeding to attempts at its solution. This, more than any other thing, transforms mere inference into tested inference, suggested conclusions into proof.”
- **Robert Ennis (1987):** “Critical thinking is reasonable reflective thinking that is focused on deciding what to believe or do.”
- **Critical thinking is variously defined :** “The process of actively and skillfully conceptualizing, applying, analyzing, synthesizing, and evaluating information to reach an answer or conclusion, disciplined thinking that is clear, rational, open-minded, and informed by evidence.”

#### **STEPS TO BETTER CRITICAL-THINKING:**

- Identify and clarify the problem
- Gather information
- Evaluate the evidence
- Consider alternatives and implications
- Choose and implement the best alternative

#### **PRINCIPLES OF CRITICAL THINKING:**

- Gather complete information.
- Understand and define all terms.
- Question the methods by which the facts are derived.
- Question the conclusions.
- Look for hidden assumptions and biases.
- Question the source of facts.
- Don't expect all of the answers.
- Examine the big picture.
- Examine multiple cause and effect.
- Watch for thought stoppers.
- Understand your own biases and values.

#### **CHARACTERISTICS OF CRITICAL THINKING:**

- Critical thinking is reasonable and rational.
- Critical thinking is reflective.
- Critical thinking inspires an attitude of inquiry.
- Critical thinking is autonomous thinking.
- Critical thinking includes creative thinking
- Critical thinking is fair thinking.
- Critical thinking focuses on deciding what to believe or do.

#### **CHARACTERISTICS OF CRITICAL THINKING:**

- Critical thinking is reasonable and rational.
- Critical thinking is reflective.
- Critical thinking inspires an attitude of inquiry.
- Critical thinking is autonomous thinking.

- Critical thinking includes creative thinking
- Critical thinking is fair thinking.
- Critical thinking focuses on deciding what to believe or do.

#### HOW TO DEVELOP CRITICAL THINKING:

- Value objective reality.
- Keep an open mind.
- Do not tolerate ongoing and unproductive ambiguity.
- Avoid the bandwagon.
- Distinguish between observation and inference, between established facts and conjectures that follow.
- Withhold judgment until you are sure you have adequate information.
- Maintain a sense of humor.
- Cultivate intellectual curiosity.
- Don't take things at face value.
- Challenge conventional wisdom.
- Resist appeals to emotion.
- Beware others' ego pleasing behavior.
- Be aware of your own ego enhancing behavior.
- Maintain a sense of perspective.
- When under pressure, stop and think.
- Weed out negative self talk.
- Practice empathy.
- Take time to check the facts.
- Check the validity of your information.
- Cultivate listening skills.
- Be aware of illogical thinking.

#### THE IMPORTANCE OF CRITICAL THINKING:

**1.Critical thinking is a domain-general thinking skill:** The ability to think clearly and rationally is important whatever we choose to do. If you work in education, research, finance, management or the legal profession, then critical thinking is obviously important. But critical thinking skills are not restricted to a particular subject area. Being able to think well and solve problems systematically is an asset for any career.

**2.Critical thinking is very important in the new knowledge economy:** The global knowledge economy is driven by information and technology. One has to be able to deal with changes quickly and effectively. The new economy places increasing demands on flexible intellectual skills, and the ability to analyse information and integrate diverse sources of knowledge in solving problems. Good critical thinking promotes such thinking skills, and is very important in the fast-changing workplace.

**3.Critical thinking enhances language and presentation skills:** Thinking clearly and systematically can improve the way we express our ideas. In learning how to analyse the logical structure of texts, critical thinking also improves comprehension abilities.

**4.Critical thinking promotes creativity:** To come up with a creative solution to a problem involves not just having new ideas. It must also be the case that the new ideas being generated are useful and relevant to the task at hand. Critical thinking plays a crucial role in evaluating new ideas, selecting the best ones and modifying them if necessary

**5.Critical thinking is crucial for self-reflection:** In order to live a meaningful life and to structure our lives accordingly, we need to justify and reflect on our values and decisions. Critical thinking provides the tools for this process of self-evaluation.

**6.Good critical thinking is the foundation of science and democracy:** Science requires the critical use of reason in experimentation and theory confirmation. The proper functioning of a liberal democracy requires

citizens who can think critically about social issues to inform their judgments about proper governance and to overcome biases and prejudice.

#### **BARRIERS TO CREATIVE THINKING:**

- Lack Of Direction
- Fear Of Failure
- Fear Of Criticism
- Striving For Constancy
- Passive Vs. Proactive Thinking
- Rationalizing And Justifying

#### **CONCLUSION:**

Critical thinking is self-guided, self-disciplined thinking which attempts to reason at the highest level of quality in a fair-minded way. People who think critically consistently attempt to live rationally, reasonably, empathically. They are keenly aware of the inherently flawed nature of human thinking when left unchecked. They strive to diminish the power of their egocentric and socio-centric tendencies. They use the intellectual tools that critical thinking offers concepts and principles that enable them to analyze, assess, and improve thinking. They work diligently to develop the intellectual virtues of intellectual integrity, intellectual humility, intellectual civility, intellectual empathy, intellectual sense of justice and confidence in reason. They realize that no matter how skilled they are as thinkers, they can always improve their reasoning abilities and they will always at times fall prey to mistakes in reasoning, human irrationality, prejudices, biases, distortions, uncritically accepted social rules and taboos, self-interest, and vested interest. They strive to improve the world in whatever ways they can and contribute to a more rational, civilized society. At the same time, they recognize the complexities often inherent in doing so. They strive never to think simplistically about complicated issues and always consider the rights and needs of relevant others. They recognize the complexities in developing as thinkers, and commit themselves to life-long practice toward self-improvement. They embody the Socratic principle: **“The unexamined life is not worth living, because they realize that many unexamined lives together result in an uncritical, unjust, dangerous world.”**

#### **BIBLIOGRAPHY:**

- 📖 Alec Fisher: *The Logic of Real Arguments*. Cambridge University Press: Cambridge 2004 (2nd edition).
- 📖 Tracy Bowell and Gary Kemp: *Critical Thinking: A Concise Guide*. Routledge: London 2010 (3rd edition).
- 📖 Joe Y. F. Lau: *An Introduction to Critical Thinking and Creativity: Think More, Think Better*. Wiley: Hoboken 2011.
- 📖 Bunker, L., Williams, J.M., & Zinsser (1993). Cognitive techniques for improving performance and building confidence: In J. M. Williams (Ed.), *Applied sport psychology: Personal growth top peak performance* 2nd ed., Mountain View CA: Mayfield.

#### **WEB-BIBLIOGRAPHY:**

- 📖 [www.criticalthinking.org](http://www.criticalthinking.org).
- 📖 [www.howidecide.org](http://www.howidecide.org).
- 📖 <http://www.thinkwatson.com/ebook>.
- 📖 [www.criticalthinking.com/ebook](http://www.criticalthinking.com/ebook).
- 📖 [criticalthinkingindia.in/critical-thinking-ebook](http://criticalthinkingindia.in/critical-thinking-ebook).

-----