Top 10 Critical Thinking FAQs



1. Can experts agree on a definition of "critical thinking?"

Yes. And they have. An international panel of more than forty-five experts achieved this consensus: Critical thinking is the process of purposeful reflective judgment. This process gives reasoned consideration to the relevant evidence, contextual factors, methods of inquiry, standards of knowledge, and concepts in order to decide what to believe or what to do. Basically, critical thinking is a process. Its purpose is to use reasoning to make critically important decisions and to understand and solve problems of all kinds. For details, see "<u>Critical Thinking: What It Is and Why It Counts</u>." Today this consensus conceptualization is used throughout the world across multiple professional fields and academic disciplines.

2. Who benefits from developing strong critical thinking?

Only those who have problems to solve, decisions to make, and a desire to know what is true. Yes, that would be just about everyone – children and adults, individuals and groups, leaders and followers. Think of the word "critical" in the expression "critical thinking" as meaning "important." If any of these are important to you, then you would benefit by strengthening your critical thinking skills and forming the consistent intention to apply those skills: (a) determining whether you understand situations correctly, (b) figuring out if you are being deceived or taken advantage of, or (c) determining what course of action you should take to achieve your goals or solve your problems.

3. What skills are used in thinking critically?

Interpretation, analysis, inference, evaluation, explanation, and self-regulation. Interpretation is determining what something means, what is being communicated, using all the textual, contextual, physical, and emotional cues. Analysis is determining what the question or problem is by looking at its elements and how they go together. Inference is determining the consequences of various options, whether those consequences be certain, probable, or only possible. Evaluation is assessing the credibility of a claim including the credibility of the source of the claim. Evaluation also includes assessing the strength of inferences, explanations and arguments. Explanation is the skill of presenting, in a fair-minded manner, the basis upon which a decision about what to believe or what to do was made. Explanation includes giving the reasons, describing the evidence, telling why a given approach or method was applied, how a set of standards for success were selected and used. Explanation can include defining key concepts and sharing what factors in the context made a difference. The sixth skill, self-regulation is evaluating our own thinking and, where appropriate, correcting our own thinking. To do this we must courageously apply evaluation to our own interpretations, analyses, inferences, and explanations. And, if we find any shortcomings, we must then make necessary corrections.

4. What about creativity and emotion – are they part of critical thinking?

Yes. Both are essential when a human being or group of people is engaged in a serious and sincere effort to reason through the practical question of what to believe or what to do. It takes creativity, empathy, and emotional sensitivity to interpret people and situations correctly, to confidently analyze with accuracy what the real problem or problems are, to discover and to systematically sort through all of our viable options when addressing a difficulty problem, and to come up with ways to search for and find the evidence needed to decide what to believe or what to do. Human thinking is not like machine thinking. Reason and emotion are linked in the human mind. Creativity and imagination are as much a part of sound reasoning as are logic, rigor, and maturity of judgment.

5. "Courageously," "systematically," "confidently," and "maturity of judgment," suggest that critical thinking is more than just skills.

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Correct. Critical thinking is a process which requires strong skills. But, like anything that requires strong skills to achieve success, the human person or team of people engaging in that process must have the motivation to apply their skills to reach their goal. Like making music, playing a sport, cooking, or running a business, we need to exercise and strengthen our skills and consistently nurture a positive intention to use those skills. Internalized, this mindset toward critical thinking becomes a set of mental habits or disciplines. They drive us to think as well as we are able whenever we have problems to solve, decisions to make, and questions about what to believe and whom to trust.

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6. What are those critical thinking habits or disciplines of mind?

Truth-seeking is the most important one. Truth-seeking is the courageous and driving desire to follow reasons and evidence wherever they lead, even if doing so calls into question one's preconceptions or cherished beliefs. The opposite is bias and intellectual dishonesty. Open-mindedness is another, as is making the effort to approach problems in an organized and systematic manner. Foresight, meaning trying to anticipate consequences, is vital for strong critical thinking. The opposites of those would be intolerance or closed-mindedness, disorganized thinking, and indifference with regard to what might happen next. Confidence in the use of reasoning is an important habit of mind. People with a positive critical thinking mindset see the application of scientific strategies and the powers of human reasoning as the best way of seeking knowledge and determining what policies and courses of action to pursue. The opposite would be to be ruled by superstition and ignorance. Inquisitiveness, a driving curiosity that leads us to learn and to grow, is another positive critical thinking habit of mind. As is maturity of judgment, which means going deeply enough into problems to get beyond a superficial "black or white" analysis, seeing shades of gray. And, having the maturity to change your mind when the facts show that a change is needed, or holding firm to a well-reasoned judgment even if it is unpopular or difficult.

7. Can we teach critical thinking?

Yes. Three things work at every educational level and across all subjects. Ask questions that evoke the skills. Ask questions that demand that sound interpretations, careful analyses, solid inferences, accurate evaluations, and thoughtful explanations be made. Teach critical thinking by asking why and insisting that the answers are fair-minded and thorough in the ways that they draw on the evidence and express the reasons for those judgements. The demands for demonstration of critical thinking increase, naturally, as the educational levels advance. But there is no level, including pre-school, that is too soon. And, no level, including post-doctoral research, that is too late to continually strengthen critical thinking. There is no subject matter or field of study or topic of discussion that cannot be used as the framework for teaching critical thinking. Beyond asking questions, demonstrate by your own behavior that you use your critical thinking skills and practice positive habits of mind, like truth-seeking and maturity of judgment. Share how you think, not just what you think. And, third, take the time to coach and mentor strong critical thinking.

8. What about just using experience and intuition?

Intuition and experience are linked. Intuition is nearly instantaneous pattern-recognition that enables us to decide quickly and, for the most part, correctly what to think or do in each situation where we have acquired practical expertise. Intuition, in other words, is learned. It is well-trained. It comes through repeatedly applying critical thinking to our experiences, and, over the years, refining each time how we interpret, analyze, evaluate, explain, and infer the proper course of action. Intuition is learning that has been refined by reflection and repetition.

9. Are you saying snap judgments cannot be good judgments too?

Snap judgments often are good judgements. Our minds, unlike machines, have two decision-making engines, or systems for decision making. System 1 is reactive, holistic, quick, instinctive, automatic. System 2 is reflective, detailed, thoughtful, cerebral, and deliberative. System 1 is as easy as riding a bicycle; System 2 lets us think about a problem at work while we are using System 1 to ride that bicycle. Generally, our two systems work reasonably well together. But, as we all have experienced, at times they can push and pull us in opposite directions. Along with our two decision-making systems, through natural selection our species has inherited decision making shortcuts called "cognitive heuristics." The tendency to trust our first affective impressions is one heuristic. It is often right, but it can be wrong. The tendency to divide people into "us vs. them" is an example of one heuristic shortcut we often use to decide who to trust. It can be right in some cases, but it certainly is wrong in others. The same is true for the other heuristic shortcuts. When the stakes are high and there is time to consider options, instead of just reacting with a snap System 1 judgement, strong critical thinkers engage in some System 2 reflection before making their decision.

10. Can critical thinking be measured?

Absolutely. Today there are valid instruments to reliably assess critical thinking skills and critical thinking habits of mind in a wide variety of workplace settings from the support staff to the C-suite level, and at every educational level from kindergarten through graduate/professional.

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