CRITICAL THINKING

DEFINE CRITICAL THINKING

SESSION 5

Defining Critical Thinking

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. Critical thinking — in being responsive to variable subject matter, issues, and purposes — is incorporated in a family of interwoven modes of thinking, among them: scientific thinking, mathematical thinking, historical thinking, anthropological thinking, economic thinking, moral thinking, and philosophical thinking.

Critical thinking can be seen as having two components: 1) a set of information and belief generating and processing skills, and 2) the habit, based on intellectual commitment, of using those skills to guide behavior. It is thus to be contrasted with: 1) the mere acquisition and retention of information alone, because it involves a particular way in which information is sought and treated; 2) the mere possession of a set of skills, because it involves the continual use of them; and 3) the mere use of those skills ("as an exercise") without acceptance of their results.

Critical thinking varies according to the motivation underlying it. When grounded in selfish motives, it is often manifested in the skillful manipulation of ideas in service of one''s own, or one's groups'', vested interest. As such it is typically intellectually flawed, however pragmatically successful it might be. When grounded in fairmindedness and intellectual integrity, it is typically of a higher order intellectually, though subject to the charge of "idealism" by those habituated to its selfish use.

Critical thinking of any kind is never universal in any individual; everyone is subject to episodes of undisciplined or irrational thought. Its quality is therefore typically a matter of degree and dependent on , among other things, the quality and depth of experience in a given domain of thinking or with respect to a particular class of questions. No one is a critical thinker through-and-through, but only to such-and-such a degree, with such-and-such insights and blind spots, subject to such-and-such tendencies towards self-delusion. For this reason, the development of critical thinking skills and dispositions is a life-long endeavor.

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 sociocentric 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 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

Why Critical Thinking?

The Problem

Everyone thinks; it is our nature to do so. But much of our thinking, left to itself, is biased, distorted, partial, uninformed or down-right prejudiced. Yet the quality of our life and that of what we produce, make, or build depends precisely on the quality of our thought. Shoddy thinking is costly, both in money and in quality of life. Excellence in thought, however, must be systematically cultivated.

A Definition

Critical thinking is that mode of thinking - about any subject, content, or problem - in which the thinker improves the quality of his or her thinking by skillfully taking charge of the structures inherent in thinking and imposing intellectual standards upon them.

The Result

A well cultivated critical thinker:

- raises vital questions and problems, formulating them clearly and precisely;

- gathers and assesses relevant information, using abstract ideas to interpret it effectively comes to well-reasoned conclusions and solutions, testing them against relevant criteria and standards;
- thinks openmindedly within alternative systems of thought, recognizing and assessing, as need be, their assumptions, implications, and practical consequences; and
- communicates effectively with others in figuring out solutions to complex problems.

Critical thinking is, in short, self-directed, self-disciplined, self-monitored, and self-corrective thinking. It presupposes assent to rigorous standards of excellence and mindful command of their use. It entails effective communication and problem solving abilities and a commitment to overcome our native egocentrism and sociocentrism.

Our Concept and Definition of Critical Thinking

Why Critical Thinking?

The Problem

Everyone thinks. It is our nature to do so. But much of our thinking, left to itself, is biased, distorted, partial, uninformed, or downright prejudiced. Yet, the quality of our life and that of what we produce, make, or build depends precisely on the quality of our thought. Shoddy thinking is costly, both in money and in quality of life. Excellence in thought, however, must be systematically cultivated.

A Definition

Critical thinking is that mode of thinking — about any subject, content, or problem — in which the thinker improves the quality of his or her thinking by skillfully analyzing, assessing, and reconstructing it. Critical thinking is self-directed, self-disciplined, self-monitored, and self-

corrective thinking. It presupposes assent to rigorous standards of excellence and mindful command of their use. It entails effective communication and problem-solving abilities, as well as a commitment to overcome our native egocentrism and sociocentrism.

To Analyze Thinking

Identify its purpose, and question at issue, as well as its information, inferences(s), assumptions, implications, main concept(s), and point of view.

To Assess Thinking

Check it for clarity, accuracy, precision, relevance, depth, breadth, significance, logic, and fairness.

The Result

A well-cultivated critical thinker:

• Raises vital questions and problems, formulating them clearly and precisely

• Gathers and assesses relevant information, using abstract ideas to interpret it effectively

• Comes to well-reasoned conclusions and solutions, testing them against relevant criteria and standards

• Thinks openmindedly within alternative systems of thought, recognizing and assessing, as needs be, their assumptions, implications, and practical consequences

• Communicates effectively with others in figuring out solutions to complex problems

The Etymology & Dictionary Definition of "Critical Thinking"

The concept of critical thinking we adhere to reflects a concept embedded not only in a core body of research over the last 30 to 50 years but also derived from roots in ancient Greek. 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."

In Webster's New World Dictionary, the relevant entry reads "characterized by careful analysis and judgment" and is followed by the gloss, "critical — in its strictest sense — implies an attempt at objective judgment so as to determine both merits and faults." Applied to thinking, then, we might provisionally define critical thinking as thinking that explicitly aims at well-founded judgment and hence utilizes appropriate evaluative standards in the attempt to determine the true worth, merit, or value of something.

The tradition of research into critical thinking reflects the common perception that human thinking left to itself often gravitates toward prejudice, over-generalization, common fallacies, self-deception, rigidity, and narrowness.

The critical thinking tradition seeks ways of understanding the mind and then training the intellect so that such "errors", "blunders", and "distortions" of thought are minimized. It assumes that the capacity of humans for good reasoning can be nurtured and developed by an educational process aimed directly at that end.

The history of critical thinking documents the development of this insight in a variety of subject matter domains and in a variety of social situations. Each major dimension of critical thinking has been carved out in intellectual debate and dispute through 2400 years of intellectual history.

That history allows us to distinguish two contradictory intellectual tendencies: a tendency on the part of the large majority to uncritically accept whatever was presently believed as more or less eternal truth and a conflicting tendency on the part of a small minority — those who thought critically — to systematically question what was commonly accepted and seek, as a result, to establish sounder, more reflective criteria and standards for judging what it does and does not make sense to accept as true.

Our basic concept of critical thinking is, at root, simple. We could define it as the art of taking charge of your own mind. Its value is also at root simple: if we can take charge of our own minds, we can take charge of our lives; we can improve them, bringing them under our self command and direction. Of course, this requires that we learn self-discipline and the art of self-examination. This involves becoming interested in how our minds work, how we can monitor, fine tune, and modify their operations for the better. It involves getting into the habit of reflectively examining our impulsive and accustomed ways of thinking and acting in every dimension of our lives.

All that we do, we do on the basis of some motivations or reasons. But we rarely examine our motivations to see if they make sense. We rarely scrutinize our reasons critically to see if they are rationally justified. As consumers we sometimes buy things impulsively and uncritically, without stopping to determine whether we really need what we are inclined to buy or whether we can afford it or whether it's good for our health or whether the price is competitive. As parents we often respond to our children impulsively and uncritically, without stopping to determine whether our actions are consistent with how we want to act as parents or whether we are contributing to their self esteem or whether we are discouraging them from thinking or from taking responsibility for their own behavior.

As citizens, too often we vote impulsively and uncritically, without taking the time to familiarize ourselves with the relevant issues and positions, without thinking about the long-run implications of what is being proposed, without paying attention to how politicians manipulate us by flattery or vague and empty promises. As friends, too often we become the victims of our own infantile needs, "getting involved" with people who bring out the worst in us or who stimulate us to act in ways that we have been trying to change. As husbands or wives, too often we think only of our own desires and points of view, uncritically ignoring the needs and perspectives of our mates, assuming that what we want and what we think is clearly justified and true, and that when they disagree with us they are being unreasonable and unfair.

As patients, too often we allow ourselves to become passive and uncritical in our health care, not establishing good habits of eating and exercise, not questioning what our doctor says, not designing or following good plans for our own wellness. As teachers, too often we allow ourselves to uncritically teach as we have been taught, giving assignments that students can mindlessly do, inadvertently discouraging their initiative and independence, missing opportunities to cultivate their self-discipline and thoughtfulness.

It is quite possible and, unfortunately, quite "natural" to live an unexamined life; to live in a more or less automated, uncritical way. It is possible to live, in other words, without really taking charge of the persons we are becoming; without developing or acting upon the skills and insights we are capable of. However, if we allow ourselves to become unreflective persons — or rather, to the extent that we do — we are likely to do injury to ourselves and others, and to miss many opportunities to make our own lives, and the lives of others, fuller, happier, and more productive.

On this view, as you can see, critical thinking is an eminently practical goal and value. It is focused on an ancient Greek ideal of "living an examined life". It is based on the skills, the insights, and the values essential to that end. It is a way of going about living and learning that empowers us and our students in quite practical ways. When taken seriously, it can transform every dimension of school life: how we formulate and promulgate rules; how we relate to our students; how we encourage them to relate to each other; how we cultivate their reading, writing, speaking, and listening; what we model for them in and outside the classroom, and how we do each of these things.

Of course, we are likely to make critical thinking a basic value in school only insofar as we make it a basic value in our own lives. Therefore, to become adept at teaching so as to foster critical thinking, we must become committed to thinking critically and reflectively about our own lives and the lives of those around us. We must become active, daily, practitioners of critical thought. We must regularly model for our students what it is to reflectively examine, critically assess, and effectively improve the way we live.

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