## Critical thinking



\* Critical thinking is the art of thinking about thinking while thinking in order to make thinking better.

It involves three interwoven phases: it analyzes thinking, it evaluates thinking, it improves thinking. \* To think critically you must be willing to examine your thinking and put it to some stern tests \* Critical thinking is the disciplined art of ensuring that you use the best thinking you are capable of in any set of circumstances. \* thinking by skillfully analyzing, assessing, and reconstructing it \* Critical thinking is self-directed, self-disciplined, selfmonitored, and self-corrective thinking \* To analyze thinking: \* Identify its purpose, question, information, conclusion(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 \* Critical thinking is the systematic monitoring of thought with the end of improvement \* To be fair-minded is to strive to treat every viewpoint relevant to a situation in an unbiased, unprejudiced way \* Fair-mindedness entails the predisposition to consider all relevant viewpoints equally without reference to one??™s own feelings or selfish interests, or the feelings or selfish interests of one??™s friends, community, or nation \* Intellectual unfairness ??" opposite of fair-mindedness \* Lack a sense of responsibility to represent accurately and fairly viewpoints with which one disagrees \* Intellectual humility ??" develop knowledge of the extent of one??™s ignorance \* Opposite of intellectual humility is intellectual arrogance \* A natural tendency to think one knows more than one does know \* Intellectual courage ??" facing and fairly addressing ideas, beliefs, or viewpoints even when this is painful \* Opposite of intellectual courage is intellectual

cowardice \* Intellectual empathy ??" put oneself imaginatively in place of others on a routine basis, so as to genuinely understand them \* Opposite of intellectual empathy is intellectual self-centeredness \* Thinking centered on one??™s self \* Egocentrism- the tendency to view everything in relationship to oneself \* Sociocentrism ??" the assumption that one??™s own social group is inherently superior to all others \* Weak-sense critical thinkers: \* Ignore the flaws in their own thinking \* Often seek to win an argument through intellectual trickery or deceit \* Lacks key higher-level skills and values of critical thinking \* Makes no good faith effort to consider alternative viewpoints \* Lacks fair-mindedness \* Strong-sense critical thinking is defined by a consistent pursuit of what is intellectually fair & just \* Strong-sense critical thinkers: \* Strive to be ethical \* Strive to empathize with others??™ viewpoints \* Will entertain arguments with which they do not agree \* Change their view when confronted with superior reasoning \* Employ their thinking reasonably rather than manipulatively \* To be fair-minded is to consider all relevant opinions equally without regard to one??™s own sentiments or selfish interests \* Confidence in Reason \* proceeds from the belief that both the individual??<sup>™</sup>s and society??<sup>™</sup>s higher interests are best served by unfettered reason \* encourages people to arrive at their own conclusions through their own powers of rational thinking \* opposite is intellectual distrust of reason \* lack of confidence in reason \* intellectual autonomy \* thinking for oneself while adhering to standards of rationality \* opposite is intellectual conformity \* intellectual dependence \* the mind performs three basic functions \* thinking \* thinking creates meaning. It sorts events in our lives into categories \* feeling \* feeling monitors the meanings created by thinking. It evaluates the degree to which life??™s events are either positive

or negative \* wanting \* wanting allocates energy into actionModule 2: Elements & Standards of CT \* reasoning ??" the mental process the mind uses to make sense of whatever we seek to understand \* reasoning is a process whereby one draws conclusions on the basis of reasons \* elements of thinking \* purposes \* the goal or objective of reasoning \* always state your purpose precisely \* Information \* The critical thinker must be able to skillfully evaluate information for accuracy and completeness \* Utilize only evidence that is clear, fair, and accurate \* questions \* as an aspiring critical thinker, you need to learn how to clearly frame the question, problem, or issue \* assess your ability to formulate the question at and clearly \* assumptions \* reasoning begins with our assumptions \* assess your ability to identify/ recognize assumptions \* implications \* implications of our reasoning are what extend beyond the position we reach \* assess your ability to identify/recognize implications \* concepts \* requires us to be aware of the concepts we hold and consider how they drive our reasoning \* assess the extent to which concepts in your reasoning are clear, precise, relevant to the issue at hand, distorted by your point of view \* inferences \* we sometimes begin with something we know and figure out something else based on it \* learn to identify whenever you or someone else has made an inference \* points of view \* the critical thinker must be able to identify within which point of view reasoning occurs \* strive for a point of view that considers opposing points of view with fairness \* strive for a point of view that is broad, flexible, and justifiable \* the standards must be applied to the elements as the critical thinker learns to develop intellectual traits \* Nine fundamental intellectual standards \* Clarity \* Clarity of thought enables us to see where our thinking is leading us \* Accuracy \* To be accurate is to represent

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something as it actually is \* Precision \* Reasoning is precise when it is specific, exact, and sufficiently detailed \* Relevance \* Something is relevant when it pertains to the problem we seek to solve \* Depth \* Directs us to delve deeper into an issue \* Plumbs beneath the surface of an issue or problem to identify the underlying complexities \* Breadth \* Directs us to look around us, at alternative or opposing perspectives \* Logic \* When thoughts and the order in which they are organized are mutually supportive and make sense in combination \* Significance \* Should concentrate on the most important information relevant to the issue at hand \* Fairness \* Thinking is fair when it is justified \* Satisfying all other fundamental intellectual standards satisfied the standard of justifiabilityGuidelines for using the standards \* All reasoning has a purpose \* All reasoning seeks to settle some question \* All reasoning is based on assumptions \* Al reasoning occurs from some point of view \* All reasoning is based on information \* All reasoning is shaped by, and expressed through, concepts \* All reasoning contains inferences by which one reaches conclusions and gives meaning to information \* All reasoning has implications and consequences\*memorizing information without understanding it describes inert information\*activated ignorance entails mentally taking in and actively using false informationModule 3: Systematic Decision Making & Problem Solving \* Critical thinking begins with a baseline of understanding or knowledge \* Three type of questions \* Questions of fact \* Evidence and reasoning within single system \* Have definite answers \* Questions of preference \* Have a range of potential answers, which reflect personal & subjective views on a topic \* Questions of judgment \* Have more than one reasoned answer, some better than others \* Question of judgment is one that requires reasoned

consideration, is debatable, and that may have competing answers \* A question of judgment does not have one correct answer, but a number of well-reasoned ones \* Nine dimensions of decision making 1. Figure out and regularly rearticulate, your most fundamental goals, , purposes, and needs 2.

Take problems and decisions one-by-one 3. Figure out the implications of alternatives 4. Figure out the information you need & seek it 5. Draw reasonable inferences from the information you analyze and interpret 6. Consider pros & cons of options 7. Be strategic in your decision-making 8. Monitor the implications of your actions and shift strategy if need be \* Seven dimensions of problem-solving 1.

Figure out and regularly reevaluate your goals, purposes, and needs 2. Identify your problems explicitly, then analyze them 3. Figure out the information you need, and actively seek that information 4.

Carefully analyze, interpret, and evaluate the information you collect. 5.

Figure out your options for action and evaluate them 6. Adopt a strategic approach to the problem, and follow-through on that strategy 7. When you act, monitor the implications of your action as they begin to emerge \* Two components in strategic thinking: identification & intellectual action. \*

Identification involves looking at your irrational emotions or desires and figuring out what generates them. \* Intellectual action requires figuring out \*

What is going on in a situation \* Options for action \* Justification for choosing an option \* Ways to reducing the impact of irrational thinkingModule 4:

Identifying Assumptions, Biases, and Fallacious Thinking \* Inert information ??" we think we understand this information, but we don??™t

and can??™t use it \* Activated ignorance ??" we mislearn or partially learn information or accept illogical beliefs and then act on them \* Activated knowledge ??" we bring significant ideas and knowledge into the mind and are able to apply them, systematically, to new situations \* Assumptions are the unstated or hidden beliefs that support our explicit reasoning about something.

\* An inference or conclusion is the outcome of reasoning \* Five key factors in establishing the accuracy and validity of information 1. Authority 2. Point-of-view 3. Transparency 4. Scope & depth 5.

Accuracy \* Three types of thinkers \* Uncritical persons \* Intellectually unskilled thinkers \* Skilled manipulators \* Weak sense critical thinkers \* Fairminded critical persons \* Strong sense critical thinkers \* A fallacy is an error in reasoning \* A fallacy is present in an argument when the premises given for the conclusion don??™t properly support the conclusion \* Common reasoning fallacies \* Ad hominem \* Dismissing an argument by attacking the person who offers it rather than by refuting its reasoning \* Appeal to authority \* To justify support for a position by citing an esteemed or wellknown figure who supports it \* Appeal to popularity \* Citing majority sentiment or popular opinion as the reason for supporting a claim \* Begging the guestion \* Asserting a conclusion that is assumed in the reasoning \* Either-or \* Assuming only 2 alternatives when, in reality, there are more than 2 \* Faulty analogy \* Drawing an invalid comparison between things for the purpose of either supporting or refuting some position \* Hasty generalization \* Inferring a general proposition about something based on too small a sample or an unrepresentative sample \* Red herring \* Introducing an https://assignbuster.com/critical-thinking-critical-essay-samples-29/

irrelevant point or topic to divert attention from the issue at hand \* Search for the perfect solution \* Asserting that a solution is not worth adopting because it does not fix the problem completely \* Slippery slope \* To suggest that a step or action, once taken, will lead inevitably to similar steps or actions with presumable undesirable consequences \* Straw man \* Distorting or exaggerating an opponent??™s argument so that it might be more easily attacked \* Two wrongs make a right \* Defending or justifying our wrong position or conduct by pointing to a similar wrong done by someone elseModule 5: Examining the Evidence \* Sound reasoning requires evidence for the claims it makes and the conclusion it reaches \* Reasoning arrives at a conclusion based on a given reason or set of reasons \* A conclusion warrants acceptance when the reasons or claims offered to support it are credible and stand up to scrutiny \* Sources of evidence \* Analogy \* Drawing a comparison between 2 things in order to show a meaningful resemblance between them \* Intuition \* A hunch, ??? gut feeling???, or premonition \* Personal observation \* What we see first hand \* Appeal to authority \* Justifying a position by citing an expert or authority who supports it \* Case example \* A detailed account of a person or event \* Testimonial \* An account of someone else??™s personal experience \* Survey/guestionnaire \* A research method or instrument for measuring people??™s attitudes or beliefs \* Research study \* A systematic set of observations collected through scientific methods \* Personal experience \* What we experience; what we ourselves do or go through \* Quantitative evidence quantifies an observation or phenomenon \* Qualitative evidence describes or recounts an observation or phenomenon \* Rival causes tell us that there is more than one credible explanation for why something happenedModule 6: The Use of Statistics \* Statistics is the science of collecting, organizing, and analyzing quantitative data \* Line graphs plot the relationship between two or more variables by using connected data points \* An average of numbers can be expressed 3 different ways \* The mean is derived by adding up all values and dividing the sum by the total number of values \* The median represents the middle value in a series of values \* The mode is the value that appears most frequently in a series of values \* risk reduction is a statistical expression that appears most commonly in reports about health risksModule 7: Thinking about Your Thinking \* egocentric thinking is the tendency to view everything in relation to self, considering only one??™s own interests and assuming that one??™s own values and beliefs are superior to others. \* A two-step process can be helpful in developing a rational mind \* Identifying the predictable, pathological tendencies we have \* Correcting these pathologies through critical thinking \* Sociocentrism is the belief that one??™s own society or group is superior to othersModule 8: Critical Thinking in the Disciplines and the Professions \* Deep learning involves developing the tools of critical thinking and applying them to whatever challenges you encounter now and in the future \*