

CHAPTER-FOUR



CRITICAL THINKING

Issues in Critical Thinking:

- ✓ **Definition**
- ✓ **Standards**
- ✓ **Principles**
- ✓ **Traits**
- ✓ **Barriers**
- ✓ **Benefits of critical thinking**

Definition:

Critical Thinking is wide range of cognitive skills and intellectual dispositions needed to effectively **identify, analyze, and evaluate** arguments and truth claims.

Critical

Involving or exercising:

- ✓ Skilled judgment or
- ✓ Observation

Hence, **critical thinking** means **thinking clearly and intelligently.**

Critical Thinking helps

- ✓ To **discover and overcome personal preconceptions and biases;**
- ✓ To **formulate and present** convincing reasons in support of conclusions; and
- ✓ To make **reasonable, intelligent decisions** about what to believe

Critical Thinking

- ✓ Thinking **clearly**
- ✓ Thinking **fairly**
- ✓ Thinking **rationally**
- ✓ Thinking **objectively**
- ✓ Thinking **independently**

Critical Thinking

- ✓ It leads to an **impartial investigation** of the **data** and **facts** that remains not swayed by irrelevant emotions.
- ✓ The aim of critical thinking is to arrive at **well-reasoned, considered,** and **justifiable** conclusions.

John Dewey

Definition:

- ✓ **Critical thinking** is an **active, persistent,** and **careful** consideration of a belief or supposed form of knowledge in the light of the grounds, which support it and the further conclusions to which it tends.
- ✓ This definition indicates **three points** about **critical thinking**.

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First: Critical thinking is an '**active**' process NOT just receiving ideas and information from other people **passively**.

Second: Critical thinking is **persistent and careful consideration** NOT unreflective and quick decision.

Third: what matters most are the **reasons** we have for believing something.

Edward Glaser

Definition:

1. **An attitude** of being disposed to consider in a thoughtful way the problems and subjects that come within the range of one's experience.
2. **Knowledge** of the methods of **logical enquiry and reasoning**; and
3. Some **skill** in applying those methods.

Robert Ennis:

Definition:

- ✓ Critical thinking as **reasonable, reflective** thinking that is focused on deciding what to believe or do.

Decision-making is an important part of critical thinking. That means when we make a decision, we should be serious about it.

Richard Paul:

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.

According to Paul:

- ✓ Critical thinking is associated with reflecting on thoughts.
- ✓ The only realistic way to develop one's critical thinking ability is through 'thinking about one's thinking' (often called 'meta-cognition')

Michael Scriven:

Definition:

Critical thinking as **skilled and active interpretation and evaluation** of observations and communications, information and argumentation.

Summary:

Critical thinking is a kind of **evaluative thinking** - which **involves both criticism and creative thinking** - and which is particularly concerned with the quality of reasoning or argument that is presented in support of a belief, or a course of action.

Standards of Critical Thinking

- ✓ Critical thinking is a **disciplined thinking governed by clear intellectual standards.**
- ✓ To identify a **critical thinking** from the **uncritical**, the following standards must be fulfilled:

Clarity

Relevance

Completeness

Logical Correctness

Precision

Consistency

Accuracy

Fairness

1. Clarity:

- ✓ **Clarity** refers to **clear understanding** of concepts and clearly expressing them in a language that is **free of obscurity and vagueness**.
- ✓ When we **construct argument**, we should take into consideration or pay close attention to clarity.

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- ✓ Before we can effectively evaluate a person's argument or claim, we **need to understand clearly what the person is saying.**
- ✓ If a statement is unclear, **we cannot determine** whether it is accurate or relevant.

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- ✓ Lack of clarity is due to **laziness, carelessness, or a lack of skill.**
- ✓ Critical thinkers, however, not only strive for **clarity of language** but also **seek maximum clarity of thought.**

2. Precision

- ✓ Precision is a matter of being **exact, accurate** and **careful**.
- ✓ To get precise understanding, we should pay close attention to details.
- ❖ **yalebet huneta new yalew” ??**
- ✓ to cut through the confusions and uncertainties that surround many everyday problems and issues, it is often necessary to insist on precise answers to precise questions

3. Accuracy

- ✓ Accuracy is about **true, correct and genuine information.**
- ✓ If the ideas and thoughts one processes are not real, then once **decision based on wrong and false information** will likely to result in **distorting realities.**
- ✓ No matter **how brilliant you may be**, you are almost guaranteed to make bad decisions if your **decisions are based on false information.**

4. Relevance

- ✓ The question of relevance is a **question of connections**.
- ✓ When there is a **discussion or debate**, it should focus on relevant ideas and information.
- ✓ That is, only those points that bear on the issue should be raised.
- ✓ Critical thinkers do not collect any information; they focus and carefully choose only the **information that has**

5. Consistency

- ✓ Consistency is about the quality of **always behaving in the same way** or of having the same opinions or standards.
- ✓ There are **two kinds of inconsistency** that should be avoided.
 1. **Logical inconsistency**: which involves saying or believing inconsistent things about a particular matter.
 2. **Practical inconsistency**: which involves saying one thing and doing another

6. Logical Correctness

- ✓ To think logically is to **reason correctly**.
- ✓ To think critically, **we need accurate and well supported beliefs**.
- ✓ When the combinations of thoughts are mutually supporting and make sense in combination, the thinking is logical.
- ✓ When the **combination is not mutually supporting**, is contradictory in some sense, or does not make sense the combination, is not logical.

7. Completeness

- ✓ In most contexts, we rightly prefer **deep and complete thinking** to shallow and superficial thinking.
- ✓ Of course, there are times when it is impossible or inappropriate to discuss an issue in depth; no one would expect, for example, a thorough and wide-ranging discussion of the ethics of the right to self-determination in a short newspaper editorial.
- ✓ However, **thinking is better** when it is **deep** rather than **shallow, thorough rather than superficial**.

8. Fairness

Critical thinking demands that our thinking be fair - that is:

- ✓ **Open minded**
- ✓ **Impartial, and**
- ✓ **Free of distorting biases and preconceptions**

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- ✓ It is probably **unrealistic** to suppose that our **thinking could ever be completely free of biases** and preconceptions; to some extent, we all perceive reality in ways that are powerfully shaped by our individual **life experiences** and **cultural backgrounds**.
- ✓ But as difficult as it may be to achieve, basic fair-mindedness is **clearly an essential attribute** of a critical thinker.

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- ✓ **Fairness** implies the **treating of all relevant viewpoints** alike without reference to one's own feelings or interests.
- ✓ Because we tend to be **biased in favor of our own viewpoint**, it is important to keep the standard of fairness at the forefront of our thinking.

Codes of Intellectual Conduct for Effective

Discussion The basic codes of intellectual
conduct, mainly consisted:

- ✓ Principles of good argument
- ✓ Principles of critical thinking.

Principles of Good Argument

One who wishes **to construct the strongest possible arguments** for his or her views, to resolve conflicts, should make each of the following principles a part of his or her intellectual style:

- ✓ The **Structural** Principle
- ✓ The **Relevance** Principle
- ✓ The **Acceptability** Principle
- ✓ The **Sufficiency** Principle
- ✓ The **Rebuttal** Principle

1. The **Structural** Principle

The structural principle of a good argument requires that:

- ✓ One who argues **for** or **against** a position should use an argument that meets the **fundamental structural requirements** of a **well-formed argument**.

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- ✓ It does not use reasons that **contradict each other.**
- ✓ It does not use reasons that **contradict the conclusion, or**
- ✓ It does not use reasons that **explicitly or implicitly assume the truth of the conclusion.**

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Criterion used to determine whether an argument is a good or not:

- ✓ **Structurally sound** (an argument must look & works like an argument).
- ✓ The **reasoning process** must be either necessary in the case of **deductive** arguments, or probably, in the case of **inductive** arguments.

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- ✓ **A good argument** should also provide us with reasons to believe that the conclusion deserves our acceptance.
- ✓ The premises in the argument **must not be incompatible with one another**.
- ✓ Such kind of reasoning cannot even function **as an argument**, let alone a good one.

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- ✓ The reasoning **must not** also be an argument with a **conclusion that contradicts one of the premises.**
- ✓ A conclusion that contradicts another claim in the same argument **violates the law of non-contradiction.**

2. The **Relevance** Principle

- ✓ This principle requires that one who presents an argument for or against a position **should set forth only reasons whose truth provides some evidence for the truth of the conclusion.**
- ✓ The **premises** of a good argument must be relevant to the **truth or merit of the conclusion.**

3. The **Acceptability** Principle

- ✓ This principle requires that one who presents an argument for or against a position should provide reasons that are likely to be **accepted by a mature, rational person** and that meet standard criteria of acceptability.
- ✓ The **reasons** set forth in support of a conclusion **must be acceptable**.

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- ✓ However, the term “**acceptable**” is **preferable** to the more traditional term “**true**” for several reasons.
- ✓ Because it is **notoriously difficult** to establish the **absolute truth** of **any statement**, it would be an impractical requirement of a good argument that its premises must be true in any absolute sense.

4. The Sufficiency Principle

The **sufficiency principle**, which requires that one who presents an argument for or against a position **should attempt to provide relevant and acceptable reasons** of the right kind, that **together are sufficient in number and weight** to justify the acceptance of the conclusion.

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- ✓ The feature of the sufficiency principle that is most difficult to apply is the assignment of weight to each piece of supporting evidence.
- ✓ Disagreement usually exists over **which evidence is more important.**
- ✓ What one participant regards as the most important piece of evidence, **another may regard as trivial** by comparison with other possible evidence

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- ✓ Thus **evidence is more relevant** and the disagreement continues until discovering the most relevant evidence.
- ✓ An Answer to the questions will tell us the **premises are sufficient**.
- ✓ **1st**: are the given reasons, even if they are relevant and acceptable, enough to drive the proposed conclusion?
- ✓ **2nd**: is the **evidence flawed** because of faulty causal analysis? Finally, is some crucial evidence missed from the argument that must be included as one of the premises to accept the

5.The **Rebuttal** Principle

- ✓ This principle requires that one who presents an argument for or against a position **should include in the argument** an effective **rebuttal (denial)** to all anticipated serious criticisms of the argument **that may be brought against it** or against the position it supports.

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- ✓ Since an argument is usually presented against the background that there is another side to the issue, **a good argument must meet that other side directly.**
- ✓ An argument cannot be a good one if it does not anticipate and effectively refute or **blunt the force of the most serious criticisms against it** and the position that it supports.

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- ✓ A complete (good) arguments expected to refute in behalf their alternate positions.

To apply a rebuttal principle to argument:

1. Identify **strongest arguments to defend**
2. Address the **counterarguments effectively**
3. What is **potential serious weaknesses**
4. Show alternative positions of the argument are flawed or unsuccessful

Arguments fail to meet the rebuttal Principle if:

If they missed the rebuttal they use several **diversionary tactics** such as:

- ✓ Forwarding **trivial objections** or resort to **humor** or ridicule, if we fail to make effective responses.
- ✓ Avoid responding to a criticism by **attacking the critic** instead of the **criticism**.
- ✓ But all of these approaches are **clear violations of our obligation** to respond

Principles of **Critical Thinking**

We have seen the **principles of a good argument** as codes of intellectual conduct.

Now let us see again the **principles of a critical thinking** as codes of intellectual conduct, such as:

- ✓ The **Fallibility** Principle
- ✓ The **Truth Seeking** Principle

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- ✓ The **Clarity** Principle
- ✓ The **Burden of Proof** Principle
- ✓ The Principle of **Charity**
- ✓ The **Suspension of Judgment** Principle
- ✓ The **Resolution** Principle

1. The Fallibility Principle

- ✓ This principle requires that each participant in a discussion of a disputed issue should be **willing to accept the fact that he or she is fallible**, or one's own initial view is not the only defensible position on the question.
- ✓ Since **we are fallible**, that is, that our present view may be wrong.

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- ✓ If you **refuse to accept your own fallibility**, you are, saying that you are **not willing to change your mind**, even if you hear a better argument.
- ✓ An **admission of fallibility**, however, is a positive sign that you are **genuinely interested in the kind of honest inquiry** that may lead to a fair resolution of the issue.

2. The Truth Seeking Principle

- ✓ This principle requires that each participant should be committed to earnestly **searching for the truth** or at least the most defensible position on the issue at stake.
- ✓ The search for truth is lifelong endeavor, which takes the form of discussion, and thoughtfully considering criticisms of our own views.
- ✓ If we are interested in finding the truth we must listen alternative arguments

3. The **Clarity** Principle

- ✓ All **positions, defences, and attacks** should be free of any kind of linguistic confusion.
- ✓ Any **successful discussion** of an issue must be **understandable**.
- ✓ Even some times, what is clear to ourselves, may not be clear for others.
- ✓ A confusing, vague, ambiguous, or contradictory language expression will not be clear for others, will not resolve

4. The Burden of Proof Principle

- ✓ This principle requires that the burden of proof for any position usually rests on the participant **who sets forth the position.**
- ✓ If, and when, an opponent asks, the **proponent should provide an argument for that position.**
- ✓ Just as a person is generally held **accountable for his or her own actions**, one who makes a positive or negative claim about something has what is called the burden of proof.

5. The Principle of Charity

- ✓ This requires that if a participant's argument is reformulated by an opponent, it must be expressed in its strongest possible version that is consistent with what is believed to be the original intention of the arguer.

6. The Suspension of Judgment Principle

- ✓ If two or more positions seem to be defended with equal strength, one should, in most cases, suspend judgment about the issue.
- ✓ If suitable evidence is so lacking that one has no good basis for making a decision either way, it may be quite appropriate to suspend judgment on the matter and wait until there is more of a basis for decision.
- ✓ However, this is not a clever way to avoid

7. The Resolution

Principle

- ✓ This principle requires that an issue should be **considered resolved** if the argument for one of the alternative positions is a **structurally sound**, one that uses **relevant and acceptable reasons** that together provide sufficient grounds to justify the conclusion and that also include an effective rebuttal to all serious criticisms of the argument and/or the position it supports.
- ✓ For the purpose of rational discussion is

Basic Traits of Critical Thinkers

- ✓ A **critical thinker** simply is a person **who exhibit some feature of critical thinking**.
- ✓ There are some **dispositions and attitudes, skills and abilities, habits and values** that every **critical person** should manifest.
- ✓ The following are the key intellectual traits of critical thinkers:

Critical thinkers:

- ✓ Are honest with themselves, acknowledging what they don't know, recognizing their limitations, and being watchful of their own errors.
- ✓ Regard problems and controversial issues as **exciting challenges**.
- ✓ Strive for understanding, **keep curiosity alive**, remain patient with complexity, and are ready to **invest time to overcome confusion**.

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- ✓ Base **judgments on evidence** rather than personal preferences, deferring judgment whenever **evidence is insufficient**. They **revise judgments** when new evidence reveals error.
- ✓ Are **interested in other people's ideas** and so are **willing to read and listen** attentively, even when they tend to disagree with the other person.

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- ✓ Recognize that **extreme views** (whether conservative or liberal) are seldom correct, so **they avoid them**, practice fair-mindedness, and **seek a balance view**.
- ✓ Practice restraint, **controlling their feelings** rather than being controlled by them, and thinking before acting.

Basic Traits of Uncritical Thinkers

Uncritical thinkers:

- ✓ Pretend they know more than they do, **ignore their limitations**, and assume their views are error-free.
- ✓ Regard problems and controversial issues as nuisances or threats to their ego.

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- ✓ Are **inpatient with complexity** and thus would rather remain confused than make the effort to understand.
- ✓ **Base judgments on first impressions and gut reactions.** They are unconcerned about the amount or quality of evidence and cling to their views steadfastly.
- ✓ Are **preoccupied** with themselves and their own opinions, and so are **unwilling to pay attention to others'** views. At the first sign of disagreement, they tend to think, "How can I refute this?"

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- ✓ **Ignore the need for balance** and give preference to views that support their established views.
- ✓ Tend to **follow their feelings** and act impulsively.
- ✓ Follow the beliefs and values of the **crowd**.

Barriers to Critical Thinking

Among the problems that impede critical thinking, it is important to mention the ff:

- ✓ **Egocentrism**
- ✓ **Unwarranted Assumptions**
- ✓ **Socio-centrism**
- ✓ **Stereotype**
- ✓ **Relativistic thinking.**

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- ✓ **Wishful thinking**
- ✓ **Lack of relevant background information**
- ✓ **Poor reading skills**
- ✓ **Bias (prejudice)**
- ✓ **Superstition**
- ✓ **Peer pressure**
- ✓ **Provincialism (narrow, unsophisticated thinking)**

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- ✓ **Narrow-mindedness**
- ✓ **Conformism**
- ✓ **Closed-mindedness**
- ✓ **Distrust in reason**
- ✓ **Scapegoating (blaming the innocent)**
- ✓ **Rationalization (inventing excuses to avoid facing our real motives)**

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Let us examine in detail **five of these impediments** that play an especially **powerful role in hindering** critical thinking:

Egocentrism

**Wishful thinking
thinking**

Unwarranted assumptions

Socio-centrism

Relativistic

1. Egocentrism

- ✓ Egocentrism is the tendency to see reality as centered on oneself.
- ✓ Egocentrics are selfish, self-absorbed people who view their interests, ideas, and values as superior to everyone else's.
- ✓ All of us are affected to some degree by egocentric biases.

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- ✓ Self-interested thinking is the tendency to **accept and defend beliefs** that harmonize with one's self-interest.
- ✓ Almost **no one** is immune to **self-interested thinking**.
- ✓ Critical thinking condemns such special pleading.
- ✓ It demands that **we weigh evidence**

2. Socio-centrism

- ✓ It is **group-centered thinking**. Just as egocentrism can hinder rational thinking by focusing excessively on the self, so socio-centrism can hinder rational thinking by focusing excessively on the group.
- ✓ Socio-centrism can distort critical thinking in **two ways**, such as **group bias** and **conformism**.

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- ✓ Group bias is the tendency to see **one's own group (nation, tribe, sect, peer group, and the like)** as being inherently **better than others**.
- ✓ Social scientists tell us that such thinking is extremely **common throughout human history and across cultures**.

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- ✓ Most people absorb **group bias unconsciously**, usually from **early childhood**.
- ✓ It is common, for example, for people to grow up thinking that their society's beliefs, institutions, and values are **better than those of other societies**.
- ✓ Although most people outgrow nationalistic biases to some extent, few of us manage to outgrow them completely.
- ✓ Clearly, this kind of “**mine-is-better**” thinking lies **at the root of** a great deal of **human conflict, intolerance, and oppression**.

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- ✓ **Conformism** refers to our tendency to **follow the crowd** - that is, to conform to authority or to group standards of conduct and belief.
- ✓ This desire can **seriously cripple our powers of critical reasoning** and decision-making.

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- ✓ Authority moves us.
- ✓ We are **impressed, influenced, and intimidated by authority**, so much so that, under the right conditions, we abandon our own values, beliefs, and judgments, even doubt our own immediate experience.
- ✓ As critical thinkers, we **need to be aware of the seductive power of peer pressure and reliance on authority** and develop habits of independent thinking to combat

3. Unwarranted Assumptions and Stereotypes

- ✓ An assumption is something we **take for granted** - something we believe to be true without any proof or conclusive evidence.
- ✓ Almost everything we think and do is **based on assumptions**.
- ✓ An unwarranted assumption is something **taken for granted without good reason**.

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- ✓ One of the **most common types of unwarranted assumptions** is a **stereotype**.
- ✓ **When we form an opinion of someone that is based not on his or her individual qualities but, rather, on his or her membership in a particular group**, we are assuming that all or virtually all members of that group are alike.
- ✓ Because **people are not identical**, no matter what race or other similarities

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- ✓ Typically, **stereotypes** are arrived at through a process known as **hasty generalization**, in which one draws a conclusion about a large class of things(in this case, people) **from a small sample**.
- ✓ The assumptions we need to become most conscious of are not the ones that lead to our **routine behaviors**, such as **carrying an umbrella or going to class**, but the ones on which we base our more important attitudes, actions, and decisions

4. Relativistic Thinking

- ✓ Relativism is the view that **truth is a matter of opinion**.
- ✓ There are **two** popular forms of relativism: **subjectivism** and **cultural relativism**. Subjectivism is the view that truth is a matter of individual opinion.
- ✓ According to **subjectivism**, whatever an **individual believes is true**, is true for that person, and there is no such thing as “**objective**” or “**absolute**” **truth**, i.e., truth that exists independent of what anyone believes.

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- ✓ **Cultural relativism** is the view that **truth is a matter of social or cultural opinion**.
- ✓ In other words, cultural relativism is the view that what is true for person A is what person **A's culture** or society believes is true.
- ✓ For the cultural relativist, as subjectivist, there is **no objective or absolute standard of truth**. What is true is whatever **most people** in a society or culture believe to be true.

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- ✓ What relativists usually claim, therefore, is **not that all truth is relative, but that truth is relative** in some important domain(s).
- ✓ Subjective and cultural relativism is also common for **moral relativism**.
- ✓ Subjective and cultural moral relativism leads to the issue that:

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- ✓ There is **widespread disagreement**, that often go very **deep**, and there **seems to be no rational way to resolve** many of them.
- ✓ Then some people conclude that there is no objective truth in ethics; morality is just a matter of individual or societal opinion.
- ✓ Another reason people find cultural moral relativism attractive is that it **seems to support the value of tolerance**.
- ✓ Throughout history, **terrible wars, persecutions**, and acts of religious and cultural **imperialism** have been perpetrated by people who firmly believed in the absolute righteousness of their moral beliefs and practices.

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- ✓ Despite these apparent attractions, however, there are deep problems with cultural moral relativism.
- ✓ First, **deep disagreement** about an issue **does not show** that there is **no objective truth** about that issue.
- ✓ **Cultural moral relativism** **does not necessarily support** the **value of tolerance**.

5. Wishful Thinking

- ✓ **Wishful thinking** refers to a state of **believing something not because you had good evidence for it but simply because you wished it were true.**
- ✓ People **fear the unknown** and **invent comforting myths** to render the universe less hostile and more predictable. They fear death and listen credulously to stories of **healing crystals, quack cures,** and communication with the dead.
- ✓ They **fantasize** about **possessing extraordinary personal powers** and accept uncritically accounts of **psychic prediction and levitation.**

Benefits of Critical Thinking

Critical thinking **as skills and dispositions:**

- ✓ Teaches to **raise and identify fundamental questions and problems** in the community.
- ✓ Teaches to **gather and assess relevant information**, develop reasoned conclusions and solutions, testing them against relevant criterion and standards.

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- ✓ To be **open minded**
- ✓ To **recognize and assess your own assumptions**, implications and practical consequences.
- ✓ To **communicate effectively** with others in figuring out solutions to complex problems.
- ✓ To be **independent, self-directed** thinker and learner

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- ✓ Becoming a critical thinker is **hard work**.
- ✓ It tones up your **mental muscles** and acquiring habits of careful, disciplined thinking.
- ✓ It **requires effort**, and **practice**.
- ✓ Critical thinking is an **adventure**.
- ✓ But in the end you'll be a **smarter, stronger, more confident thinker**.

Critical Thinking in the Classroom

- ✓ In university education, the question is not much about **what you know**, but **how you acquire what you know** and whether your ideas stands critical examination.
- ✓ The focus is on **higher-order thinking**: the **active, intelligent evaluation** of ideas and information.

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- ✓ Critical thinking **plays a vital role in universities.**
- ✓ In a critical thinking, students learn a variety of skills that can greatly improve their classroom performance. These skills include:
 - Understanding the arguments and beliefs of others.
 - **Critically evaluating** those arguments and beliefs.
 - **Developing and defending** one's own well-supported arguments and beliefs.

Critical Thinking **in Life**

Valuable in many contexts outside the classroom:

- ✓ Help us **avoid making foolish personal decisions.**
- ✓ Help us to think about **important life decisions** more **carefully, clearly, and logically.**
- ✓ **Promoting democratic processes.**
- ✓ Critical thinking is **worth studying for its own sake**, simply for the personal enrichment it can bring to our lives.

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- ✓ It helps **free us from the unexamined assumptions and biases** of our upbringing and our society.
- ✓ Critical thinking allows us to lead **self-directed, “examined” lives.**
- ✓ Such **personal liberation** is, as the word itself implies, **the ultimate goal of education.**



**THE
END!
THANK
YOU!**