



## IO2 - UNIT 3 – Critical Thinking

### Subunit 3.1.1 – Fundamentals of Critical Thinking



Co-funded by the  
Erasmus+ Programme  
of the European Union

Project number: 2018-1-ES01-KA202-050289 This project has been funded with support from the European Commission. This publication reflects the views only of the author, and the Commission cannot be held responsible for any use which may be made of the information contained therein.

# Introduction

In this subunit you will learn what is critical thinking – from the perspective of different authors – and **why** is it **important** globally and professionally speaking.

## Fundamentals of Critical Thinking



A large, orange, cloud-shaped speech bubble hangs from a black string. In the background, several other speech bubbles in various colors (purple, blue, green, orange, teal, red) are visible but out of focus.

What do you think is  
Critical Thinking?



# What is Critical Thinking?



1) The use of rational skills, worldviews, and values to get as close as possible to the truth.

*Howard Gabennesch, Committee for Skeptical Inquire*



2) Not just memorising, but the application, analysis, creation, synthesis, and evaluation of information.

*Bloom's Taxonomy*

# What is Critical Thinking?



3) The process by which we test claims and arguments and determine which have merit and which do not. The basic processes of critical thinking are **investigation**, **interpretation**, and **judgment**.

*Vincent Ruggiero*



4) A habit of mind characterised by the **comprehensive exploration** of issues, ideas, artifacts, and events **before accepting** or **formulating an opinion** or **conclusion**.

*AACU/Value Rubric*

# What is Critical Thinking?



5) The set of intellectual skills and psychological habits we need to solve problems, discover truths, and clearly communicate.

*Paul Stearns*



6) Is based on universal intellectual values that transcend subject matter divisions: clarity, accuracy, precision, consistency, relevance, sound evidence, good reasons, depth, breadth, and fairness.

*Michael Scriven & Richard Paul*

# Watch and discuss!

Watch the video with an excerpt from the *Men in Black* movie.

How do you relate the video with Critical Thinking?



<https://www.youtube.com/watch?v=pV-vf-7LbC8>



# Write!



Now that you know a bit more about **Critical Thinking**, write with your own words how would you define it.



# Critical Thinkers

Critical thinkers strive to diminish the power of their egocentric and sociocentric tendencies. **They embody the Socratic Principle, i.e., the unexamined life is not worth living**, because they realise that many unexamined lives together result in an uncritical, unjust, and dangerous world.

*Linda Elder*



# Critical Thinkers...



- ✓ are willing to **question own assumptions**;
- ✓ **seek help**;
- ✓ are **persistent**;
- ✓ are **skeptical** enough to suspend own beliefs until having enough evidences to form a reason belief;
- ✓ are **open minded** and can consider all views - not necessarily accepting all of them;
- ✓ are **fair**.

# Watch and discuss!

Watch the video “5 Qualities of a High-Standard Critical Thinker”.

- Which of the mentioned 5 qualities do you consider having?
- Which qualities do you need to improve?



<https://www.youtube.com/watch?v=cEpKihuWbuM>

# The Ability to Think Critically

The ability to think critically involves:



An **attitude** of being disposed to consider in a thoughtful way the problems and subjects that come within the range of one's experiences.



Knowledge of the **methods** of logical inquiry and reasoning.

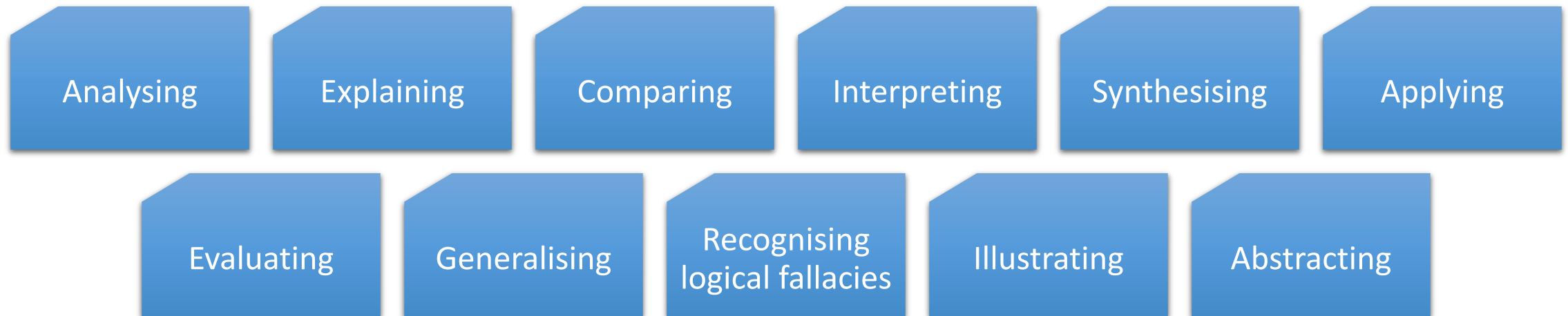


Some **skills** in applying those methods.

*Edward Glaser*

# Critical Thinking Skills

The **critical thinking skills** below are the various higher-order cognitive operations involved in processing information.




*Howard Gabennesch, Committee for Skeptical Inquiry*



# Critical Thinking is Active Thinking


**Active Thinking**

Actively evaluating one's thoughts and realising one's potential as a human being.



**Passive Thinking**

Reacting to one's first desire, emotion or idea, not evaluating own thoughts.





# Critical Thinking is Solving Problems Well

- ✓ Seeing from multiple perspectives
- ✓ Recognising patterns
- ✓ Testing those patterns
- ✓ Exercising impulse control
- ✓ Using trial and error
- ✓ ...





# Critical Thinking is Logic



- ✓ Logic is the study of correct and incorrect reasoning.
- ✓ Logicians want to understand what makes good reasoning good and what makes bad reasoning bad. Understanding this helps us to:
  - avoid making mistakes in our own reasoning;
  - evaluate the reasoning of others.

“Crime is common. Logic is rare. Therefore it is upon the logic rather than upon the crime that you should dwell.”

*Sherlock Holmes*



# Critical Thinking is Good Communication

- Critical thinking is a tool to structure your key messages in a way that delivers maximum impact. Thus **Critical Thinking and communication are intrinsically connected.**
- Effective communication requires clarity of thought, ability to listen intentionally and deliver messages in the most optimal way.

“When people talk,  
listen completely.  
Most people never  
listen.”

*Ernest Hemingway*



# Watch and discuss!

Watch the video “What is Critical Thinking?”.

– Can you give examples from your life when you applied Critical Thinking to reach a better decision?



<https://www.youtube.com/watch?v=HnJ1bqXUnIM>



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# Why is Critical Thinking Important?

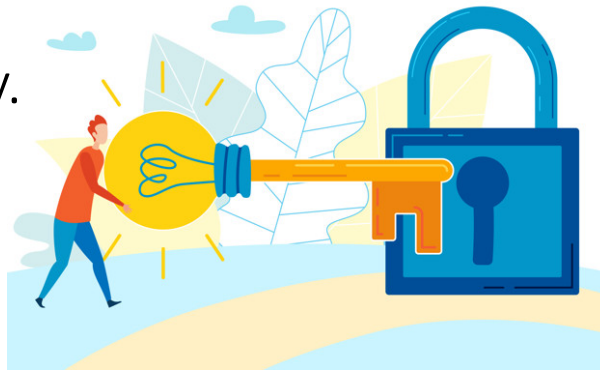


Everyone thinks but much of our thinking, left to itself, is partial, uninformed or prejudiced. Yet the quality of our life and of what we do depends precisely on the quality of our thought.

Shoddy thinking is costly, both in money and in quality of life. Excellence in thought, however, must be systematically cultivated as it is a key to a flourishing happy life!

# Why is Critical Thinking Important?

- Whatever you are doing, you will do it better if you apply Critical Thinking to it. Questioning things and putting them in perspective will help you seeing them in a different way.
- Employers want it! They want emotionally mature collaborators who can solve problems logically, deal with ambiguities, resolve conflicts, and clearly communicate.



# Watch and discuss!

Watch the video “7 Reasons Why Critical Thinking is Important”.

– Why do you think Critical Thinking is important at your place of work?

Add your inputs on this question to the initial definition you created.



<https://www.youtube.com/watch?v=kaClycmx8NA>

# Summing Up! Critical Thinking...



- ✓ Encourages independency
- ✓ Improves your self-evaluation
- ✓ Promotes good language and presentation skills
- ✓ Encourages creativity and innovation
- ✓ Encourages good decision-making
- ✓ Encourages scientific discoveries and theories
- ✓ Keeps us up-to-date with our 21st-century economy



# Critical Thinking Skills Self-assessment

Are you ready to test your

Critical Thinking skills?

Go to [http://critical-](http://critical-thinking.wikidot.com/self-assessment)

[thinking.wikidot.com/self-](http://critical-thinking.wikidot.com/self-assessment)

[assessment](http://critical-thinking.wikidot.com/self-assessment) and have fun while using

your Critical Thinking skills to resolve

the presented challenges!



# References

## Videos

- <https://www.youtube.com/watch?v=pV-vf-7LbC8> *Men in Black* excerpt (1 mnt.)
- <https://www.youtube.com/watch?v=cEpKihuWbuM> 5 Qualities of a High-Standard Critical Thinker (1.5 mnt.)
- <https://www.youtube.com/watch?v=HnJ1bqXUnIM> What is Critical Thinking (2.5 mnts)
- <https://www.youtube.com/watch?v=kaClycmx8NA> 7 Reasons Why Critical Thinking is Important (3 mnts.)





# Further information

## Websites

- <https://talentlens.in/critical-thinking-the-soul-of-effective-communication/> Critical Thinking: The Soul of Effective Communication
- <https://www.skillsyouneed.com/learn/critical-thinking.html> Critical Thinking Skills

## Videos

- <https://www.youtube.com/watch?v=J0yEAE5owVw> What is Critical Thinking? (13 mnts.)
- <https://www.youtube.com/watch?v=JZZIJ5L3K7U> Critical Thinking Overview (7 mnts.)



*Critical thinking is thinking about your thinking  
While you're thinking in order to make your  
thinking better!*

*Richard W. Paul, Critical Thinking Scholar*



# Project partners

