

# IO1/A3. TRANSVERSAL SKILLS ENHANCEMENT STRATEGY AND SUPPORTING ACTIONS (TEMPLATE)



# SEE FIRST Problem Solving: Logical Thinking

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# TRANSVERSAL SKILLS ENHANCEMENT STRATEGY AND SUPPORTING ACTIONS

### **PROJECT INFORMATION**

PROJECT ACRONYM: SEE FIRST PROJECT TITLE: SEEKING FIRST JOB EQUIPPED WITH PROPER SOFT SKILLS PROJECT NUMBER: 2019-3-EL02-KA205-005437 SUB-PROGRAMME OR KA: KA205 WEBSITE: HTTPS://SEEFIRST.EU/ CONSORTIUM: AKNOW, CIVIC, FEUZ, IDEC, EMPHASYS, DLEARN



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#### **1. GUIDELINES**

#### \*\*\*GUIDELINES\*\*\*

- Prepare 6 goal cards per skill subcategory. For example, 6 goal cards for Active listening and 6 for Negotiation.
- Fill in all the fields and maintain the formatting and structure
- Each proposed activity should be in a separate card don't combine 2 activities in one card and don't divide 1 activity into 2 cards.
- To add a new goal card, copy and paste one of the existing goal cards
- At the end of each skill subcategory, prepare 6-8 assessment questions.



#### 1. Skill Category: Problem Solving

#### **1.1 Skill subcategory: Logical Thinking**

#### 1.1.1 INTRODUCTION

This will be shown to all the users when they click on one of the skill subcategories. It will appear on the right side of the wheel.

#### **DESCRIPTION OF THE SKILL: Logical Thinking**

Logical thinking is the ability to use coherent reasoning, in order to reach a conclusion.

A complex skill entails our brains' neuroscience but also our cultural references. What we today consider logical was not always the case but, to narrow it down, logical thinking is the ability of an individual to think in a disciplined manner or base his thoughts on facts and evidence.

Often people get carried away by emotions or irrational thoughts and fears, especially when they are under pressure.

It is crucial to realise that logical thinking is a huge asset, when entering the professional field, and your secret power to battle all challenges.

#### 1.1.2. GOAL CARDS

#### TITLE OF THE PROPOSED ACTIVITY: King or Queen of Reasoning

#### **DESCRIPTION OF THE ACTIVITY**

Since the dawn of civilization, human societies have seemed to have and acknowledge the sense of morality. On the other hand, the notion of government and law materialized much later than that.

Keeping in mind that according to Oxford Dictionary

- Law is the system of rules which a particular country or community recognizes as regulating the actions of its members and which it may enforce by the imposition of penalties.
- Morality is the differentiation of intentions, decisions, and actions between those that are distinguished as proper and those that are improper.



All the participants will have to discuss if the following statements are true or false and find examples to prove their point.

Not all legal acts are moral. All illegal acts are immoral. The end justifies the means. Friendship is above the law.

In ten minutes, find the most logical examples and write them down coherently to support your statement. Each person should come up with at least five examples that can prove their point and share them to the group.

By the end of everyone's statements, the participants will vote the person who-they think- had the most convincing and logical arguments, beside



themselves. The participant with the most votes will be crowned "King or Queen of Reasoning".

#### TYPE OF THE ACTIVITY

Complex activity that requires a significant amount of time and effort but does not require the completion of another activity

#### CONNECTED ACTIVITIES

#### **TOOLS & RESOURCES NEEDED**

Video conference software, providing that the participants are not able to physically meet.



#### TIME REQUIRED

At least 45 minutes, depending on the number of players

#### Number of learners

3+

#### **RELEVANT SECTORS**

Include one or more sectors to which this skill is relevant. Please choose from the sectors below:

Arts Economics Military Law Public Administration Social sciences

#### ADDITIONAL RESOURCES

What is the difference between Ethics, Morality and the Law?

https://www.youtube.com/watch?v=Xki2fRA0bY8

History of Logic

https://www.britannica.com/topic/history-of-logic

#### Stanford Encyclopedia of Philosophy- The Liar Paradox

https://plato.stanford.edu/entries/liar-paradox/

#### 20 Types of Logic

https://simplicable.com/new/types-of-logic

#### REFERENCE

Cleverism website, Logical Thinking, retrieved 03/02/21

https://www.cleverism.com/skills-and-tools/logical-thinking/



Oxford Dictionary

#### IMAGE

https://pixabay.com/photos/chess-lady-king-chess-pieces-3894243/

#### INTRODUCTION

Define the borders between law, morality, logic and ethics, and become the King or Queen of Reasoning. Logic and creativity will be your assets in winning this battle of moral questioning and ethical dilemmas.

#### \*\*\*\* \* \* \*\*\*

#### TITLE OF THE PROPOSED ACTIVITY: A very weird planet

#### **DESCRIPTION OF THE ACTIVITY**

Logical thinking skills are a set of skills that enables you to reason logically when facing and solving problems. They allow you to provide well-reasoned answers to any issues that arise. They also lead you into making decisions that most people will consider rational.

• Critical-thinking skills.

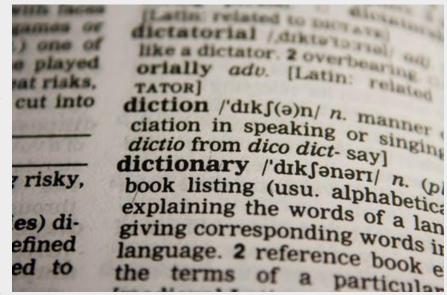
Being a critical thinker, you can break down, analyze, and evaluate a problem before making judgments and decisions. By improving your critical thinking process, you become a logical thinker. Everyone needs a logical thinker around, not only in the workplace but our lives too.

• Research skills.

Choosing your resources is also an aspect of research skills. Being an efficient researcher means that you can search and locate data that you recollect when presenting information on your choice. The more relevant information you have about a subject, the more accurate your conclusions are likely to be.

In this activity, participants imagine that they live on a new planet where they can use only thirteen verbs to communicate with each other and start a new civilization. Each participant should make a list with their verbs, and also justify their choices within the time limit of five minutes.

At the end of the task everyone reads his list of verbs out loud and then participants vote the most



logical and functional planet, based on the advantages and disadvantages that can occur from the list of selected verbs. They need also to justify their choice using logical reasoning.

#### TYPE OF THE ACTIVITY

Simple activity that can be implemented immediately without requiring the completion of another activity



#### CONNECTED ACTIVITIES

#### TOOLS & RESOURCES NEEDED

Video conference software, providing that the participants are not able to physically meet.

#### TIME REQUIRED

At least 20 minutes, depending on the number of players

#### Number of learners

3+

-

#### **RELEVANT SECTORS**

Include one or more sectors to which this skill is relevant. Please choose from the sectors below:

- Arts
- Culinary arts
- Education
- Law
- Management
- Medical and Health Care (including veterinary)
- Office Administration
- Public administration
- Social sciences

#### ADDITIONAL RESOURCES

#### REFERENCE

Cleverism website, Logical Thinking, retrieved 03/02/21

https://www.cleverism.com/skills-and-tools/logical-thinking/

Oxford Dictionary



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Zippia website

THE MOST IMPORTANT LOGICAL THINKING SKILLS (WITH EXAMPLES)

https://www.zippia.com/advice/logical-thinking-skills/

#### IMAGE

https://www.pexels.com/photo/black-and-white-book-business-close-up-267669/

#### INTRODUCTION

What happens if you have limited access to verbs but unlimited access to logic and imagination? Create your own logical vocabulary aiming to cover as many aspects of life as possible. Forgetting a word can have terrifying results, so think!



#### TITLE OF THE PROPOSED ACTIVITY What would Gods do?

#### **DESCRIPTION OF THE ACTIVITY**

There are many things you can do to strengthen your logical thinking skills. Keeping in mind that we are all different, take these tips under consideration and adjust them to your own unique personality.

- Spend time on creative hobbies. That be it theatre, painting, singing or rap dancing, choose a hobby you find interesting and engaging, and go for it.
- Practice questioning.
  Never just accept an answer without checking it, questioning it, even if it an answer you gave to yourself.
- Socialize with others.
  Being around your friends and peers is highly beneficial to your mood, mental health, and logical thinking, as you communicate, and assist them in various decisions and issues they might face.





In this activity, participants are called to choose one of the ancient Greek Gods: Zeus, Poseidon, Hera, Demeter, Athena, Apollo, Artemis, Ares, Aphrodite, Hephaestus, Hermes, Hestia, Dionysus. It is preferable each participant to choose a different God, so the game is more interesting.

After their choice of God, they are called to answer the following question as their alter ego of choice, and not themselves. So, they have to think everything they know about each God's characteristics, strong assets or weak points, preferences and personality. They are called to find a solution to a problem, trying not to cause more problems-as ancient Gods sometimes did...

"Mortals are struggling and they face numerous problems. If I were a life coach, what would I advise people to do to solve their issues and maintain their mental, physical and financial well-being during a pandemic?"

All participants, take ten minutes to prepare their plan as their God of



choice. If someone has no idea at all about their God of choice, they can two of their ten minutes to find information online. When everyone is ready, they share their ideas and proposals, staying in character, trying to win the title of "Devine Life Coach" which goes to the God with the most votes.

No one can vote for themselves-not even Zeus.

#### TYPE OF THE ACTIVITY

Simple activity that can be implemented immediately without requiring the completion of another activity

#### **CONNECTED ACTIVITIES**



# \*\*\*\*

#### TOOLS & RESOURCES NEEDED

Video conference software, providing that the participants are not able to physically meet.

#### TIME REQUIRED

At least 30 minutes, depending on the number of players

#### Number of learners

5-12

#### **RELEVANT SECTORS**

Include one or more sectors to which this skill is relevant. Please choose from the sectors below:

- Arts
- Culinary arts
- Education
- Management
- Office Administration
- Public administration
- Social sciences

#### **ADDITIONAL RESOURCES**

12 Main Gods of Greek Mythology

https://www.theoi.com/articles/12-main-greek-gods-of-greek-mythology/

12 Greek Gods and Godesses

https://www.britannica.com/list/12-greek-gods-and-goddesses

#### REFERENCE

Cleverism website, Logical Thinking, retrieved 03/02/21

https://www.cleverism.com/skills-and-tools/logical-thinking/

Oxford Dictionary



IMAGE

https://www.pexels.com/photo/plaster-sculpture-of-apollo-in-medical-mask-6075007/

#### INTRODUCTION

Is God logic? Which God represents which kind of logic? And what would you do if you were a strong ancient God? Which powers would you use to find solutions and solve mortal problems? Click to find out!



#### TITLE OF THE PROPOSED ACTIVITY: Is it the Mona Lisa?

#### **DESCRIPTION OF THE ACTIVITY**

Reasoning cab be defined as "the process of using existing knowledge to draw conclusions, make predictions, or construct explanations". The three methods of reasoning are the deductive, inductive, and abductive approaches.

- Deductive reasoning starts with the assertion of a general rule and proceeds from a guaranteed specific conclusion.
- Inductive reasoning begins with specific and limited observations in scope, and proceeds to a generalized conclusion that is likely, but not certain, depending on accumulated evidence.
- Abductive reasoning typically begins with an incomplete set of observations and proceeds to the likeliest possible explanation for this particular set.

this activity In participants will work in pairs. The two players find online a famous painting each so they can be sure about the name of the painter or the era that the painting was created, and read all the necessary information about it. In turns they try to find which painting their peer has chosen by asking maximum 15 questions. They can ask anything they decide that will help them find the right answer, using their critical thinking



and deduction techniques. Whoever finds the painting in fewer questions is the winner. If they enjoy the game, they can repeat it as many times as they want, keeping score.

#### **TYPE OF THE ACTIVITY**



Simple activity that can be implemented immediately without requiring the completion of another activity

#### **CONNECTED ACTIVITIES**

#### TOOLS & RESOURCES NEEDED

Video conference software, providing that the participants are not able to physically meet.

#### TIME REQUIRED

At least 15 minutes

Number of learners

2

#### **RELEVANT SECTORS**

Include one or more sectors to which this skill is relevant. Please choose from the sectors below:

- Aesthetics
- Arts
- Education
- Social sciences

#### ADDITIONAL RESOURCES

Time Out New York online magazine

https://www.timeout.com/newyork/art/top-famous-paintings-in-art-history-ranked

#### REFERENCE

Cleverism website, Logical Thinking, retrieved 03/02/21

https://www.cleverism.com/skills-and-tools/logical-thinking/

Oxford Dictionary



#### Butte college website

Deductive, Inductive and Abductive Reasoning

http://www.butte.edu/departments/cas/tipsheets/thinking/reasoning.html

#### IMAGE

https://pixabay.com/photos/paint-arts-artist-painter-brush-2940513/

#### INTRODUCTION

Which is the most famous painting in history? And how can you decide in only fifteen questions if Mona Lisa is the right answer or not? Use your logic to find the appropriate questions which will reveal the most artistic right answers.



#### TITLE OF THE PROPOSED ACTIVITY: Would you survive?

The art of persuasion is indeed a very sought-after talent, that contains both logical and emotional elements. You cannot convince someone just with clear, pure logic, as we all are complicated human beings ruled by both our minds and hearts. To convince your audience, use reasoning, testimonies, examples, and analogies, and as much evidence as you have. But don't forget to use your emotional intelligence, your empathy skills, and last but not least your charm too.

In this activity, the more participants the more fun and also difficult it will be. Participants are called to imagine that they will end up all together on a deserted island and will have to make a personal list of 15 items to bring with them.

Each player writes down 15 items that he/she considers as essential for living on a deserted island.



The tricky part is that the maximum allowed number of items to bring as a whole team is 25.

When everyone completes their list, they read it out loud trying to prove in two minutes that their items are more essential than other participants' ones.

Even if some people have the same items on their lists, they still have to advocate in favour of their own items, trying to find reasonable arguments to back their statement. Each participant gets to speak for an extra two minutes after the completion of everyone's list.

Participants have to come to terms, agree and make a selection of 25 final items.

The person that ends up having more of his listed items selected in the final list is the winner.

#### **TYPE OF THE ACTIVITY**

Simple activity that can be implemented immediately without requiring the completion of another activity



#### CONNECTED ACTIVITIES

#### TOOLS & RESOURCES NEEDED

Video conference software, providing that the participants are not able to physically meet.

#### TIME REQUIRED

At least 20 minutes depending on the number of players

#### Number of learners

6+

#### **RELEVANT SECTORS**

Include one or more sectors to which this skill is relevant. Please choose from the sectors below:

- Aesthetics
- Agriculture
- Arts
- Culinary arts
- Engineering
- Management
- Medical and Health Care (including veterinary)
- Natural sciences
- Tourism

#### ADDITIONAL RESOURCES

Inc. website

How to persuade almost anyone

https://www.inc.com/will-yakowicz/persuasion-equation-win-hearts-or-minds.html

REFERENCE



Cleverism website, Logical Thinking, retrieved 03/02/21

https://www.cleverism.com/skills-and-tools/logical-thinking/

Oxford Dictionary

Indeed website

The best ways to strengthen your logical thinking skills

https://www.indeed.com/career-advice/career-development/strengthen-logical-thinking-skills

#### IMAGE

https://www.pexels.com/photo/yellow-van-die-cast-386025/

#### INTRODUCTION

Is your charger better than your peer's charger? And how will you charge your phone in a deserted island? Find the most logical statements to back your choices and become the most equipped castaway.



#### TITLE OF THE PROPOSED ACTIVITY: Create a very creative problem

In one of his articles Jeffrey Baumgartner mentions that "Creative people are almost always very logical thinkers. However, their logic is not based on the status quo always being right; it is not based on doing things exactly as they have always been done; it is not about conforming to everyone else's thinking. It is about establishing a logic that makes sense to the creative thinker and their audience (be they fans of their music, followers of their science papers or readers of their novels)".

Creativity is not the opposite of logic, on the contrary creativity can reveal extremely logical solutions, just maybe not the most obvious one. Trust your logic but also your creative spirit.

In pairs of two, participants are called to create a short story and follow specific rules.

Story must contain at least :

1.A very unexpected problem that requires solving

2.A cat

3.Three characters beside the cat

4.A logical explanation behind the reason of the problem

5.Three different logical endings -solutions to the story

6.One irrational alternative end.

All the participants get 10



minutes to come up with their creative story, which then they will share with everyone else.

After everyone has read their story, participants vote the most creative, surprising, complicated and engaging story.

#### TYPE OF THE ACTIVITY

Simple activity that can be implemented immediately without requiring the completion of another activity

#### CONNECTED ACTIVITIES



#### \*\*\*\* \* \* \*\*\*

#### **TOOLS & RESOURCES NEEDED**

Video conference software, in case the participants are not able to meet physically.

#### TIME REQUIRED

At least 30 minutes depending on the number of players

Number of learners

6+

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#### **RELEVANT SECTORS**

Include one or more sectors to which this skill is relevant. Please choose from the sectors below:

- Aesthetics
- Arts
- Management
- Military
- Natural sciences

#### **ADDITIONAL RESOURCES**

#### REFERENCE

Cleverism website, Logical Thinking, retrieved 03/02/21

https://www.cleverism.com/skills-and-tools/logical-thinking/

Oxford Dictionary

Creativity is very logic, by Jeffrey Baumgartner

https://www.creativejeffrey.com/creative/logic.php



IMAGE

https://www.pexels.com/photo/close-up-of-human-hand-256514/

#### INTRODUCTION

Is one logical solution to a problem enough? Or maybe we need more? Creating a problem is indeed a problem or a fun activity sharpening our minds? Click to find out.

1.1.1.

#### ASSESSEMENT QUESTIONS

#### **True or False**

1) Lawmaking preexisted the sense of morality (False)

2) Taking in consideration other people needs leads to poor reasoning (False)

3) Feeling invincible can lead to irrational decisions (True)

- 4) There may be two or more logical answers to one question (True)
- 5) What we consider logical is a mix of moral standards and religion. (False)

6) Risky solutions are never logical (False)

7) Imagination is logic's enemy. (False)

8) In order to find the best solution to a problem you must look in what created it in the first place (True)