



**INSPIRING REVOLUTIONARY  
EDUCATIONAL CREDENTIALS**

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# **Module 11**





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## ABOUT THE PROJECT

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OBEC (2020-1-SE01-KA204-077803) is a KA2 Strategic Partnership co-funded by the Erasmus+ of the European Union. Led by Swideas in Sweden, the project gathers partners in Croatia (Regional Development Agency of Sisak-Moslavina County - SIMORA), Italy (LAI-MOMO Società Cooperativa Sociale & Università degli studi di Urbino Carlo Bo), Belgium (EURADA - Association Européenne Des Agences Développement).

OBEC is an innovative project that aims to explore the potentials of Blockchain technology to promote competency development and recognition of skills and qualifications by creating an innovative system to issue and validate learning credentials on a trial basis. Through this effort, the project's goal is to encourage the professional and academic integration of migrants, exchange students, and individuals with informal and non-formal learning backgrounds.

By contributing to the educational and economic integration of these targeted groups, OBEC envisions to benefit individuals with migrant background, students, teachers, education institutions, and employers. Focusing on the key issue of lack of uniformity and transparency in systems of validation of credentials, it is expected that this effort will result in positive effects in the working context, promoting employability, empowerment, and accessibility to the labour market.



## Lecture Notes

Slide 1: Title and introduction to the module.

Explain why critical thinking, understanding a text and recognizing fallacies is an important feature in order to become rational reasoners.

Slide 2: Introduction to the OBEC project.

Explain what OBEC is, its aims and methodologies.

Reference should be made especially to IO2.

Slide 3: Introduction to the first part of the module (approx. 18 hours).

The teacher should briefly explain what a critical analysis of a text should be. Moreover, the teacher will briefly explain what does it mean to communicate information effectively.

In particular, the components will be:

i) How to read in order to understand; ii) The types and components of a text; iii) Basic textual analysis; iv) Complete analysis of an argumentative text; v) General exercises. [For the analysis part].

a) Identifying the listeners; b) Proper information selection;

c) Clarity in exposition; d) General exercises. [For the communication part].

Slide 4: Read to understand.

The teacher should introduce the various typologies of reading strategies.

Scanning; Skimming; Receptive Reading. The teacher should place emphasis on the fact that different reading modalities can produce different effects.

Slide 5: Scanning.

Consist in searching for specific information inside a text, without following a predetermined path of consultation. Typical of encyclopedias or text which are used only as reference for specific information (e.g., a formula in a formal text).

Also called "non-sequential" reading.

Slide 6: Skimming.

Consist in quickly reading a text in order to form a judgement about it.

Mostly focuses on the structural characteristics of a text (titles, subtitles, highlighted words, figures, initial and final sentences in paragraphs).

Slide 7: Receptive Reading.

Completely involved form of reading. The reader pays attention to all details present in a text. Needed to form a complete understanding of the contents of a text.

Slide 8: Exercise.

The teacher should ask students to identify the proper way of reading specific texts given specific goals. Any kind of example could be employed.

Slide 9: Typologies of a text.

The teacher should highlight that there are different typologies of text, making some examples to fix the idea. In particular, five typologies should be discussed.

i) Descriptive texts; ii) Fiction texts; iii) Regulatory texts; iv) Exposition texts; v) Argumentative texts.

Slide 10: Characteristic of each typology.

The teacher should give a quick overview of the characteristics of each typology of text.

Slide 11: Descriptive texts.

They describe a specific reality. This description could be made in different ways: from particular to general; from synthesis to analysis; using objective or subjective descriptions.

Slide 12: Fiction.

The text follows a story, which might not correspond to a real scenario present in the world.

Slide 13: Regulatory texts.

They indicate orders, instructions, advices, etc. The language employed should be straightforward and clear. Some technical terms are acceptable.

Slide 14: Exposition texts.

They have the aim of providing information. They could contain details of an idea, of a phenomenon, of a concept. They must be simple and clear.

Slide 15: Argumentative texts.

They are texts that discuss a problem, expressing a certain position on them. Arguments are employed to reach the goal, by either providing support to the authors thesis or downgrading the antithesis.

Slide 16: Exercise.

Slide 17: Exercise.

Slide 18: Exercise.

Slide 19: Exercise.

For each of the previous exercises, recognize the typology of the text. Any kind of text could be used for those exercises.

Slide 20: Introduction to basic analysis of a text.

The teacher should explain that the analysis of a text has different depths.

The first level is concerned with the intentions of the author and the context of the text.

Slide 21: The author's intentions.

The teacher should highlight that different authors might have different goals and those are important to properly assess a text. All the elements of a communication act should be introduced: i) the sender; ii) the receiver; iii) the message; iv) the content; v) the code (language employed to write the message); vi) the transmission media. Each of those elements will contribute to reach the author's goal in a specific way.

Slide 22: The context.

The teacher should talk about the different contexts in which a text might be contained.

There are at least 2 types of contexts: physical and logical. The physical context is the environment in which the text is contained (the pages of a book); the logical context is the context in which the content of a text is inserted (e.g., historical presentation).

Slide 23: Exercise.

Slide 24: Exercise.

Slide 25: Exercise.

Slide 26: Exercise.

Slide 27: Exercise.

In each of the previous exercises, the student must identify the type of text, the author's intentions and the context. Any kind of text could be employed by the teacher.

Slide 28: Introduction to the critical analysis of a text.

The teacher should start introducing the second level of analysis of a text.

In the module the focus has been placed on argumentative text, but any other type of text could be used based on the scope of the application of the module.

Slide 29: The components of an argumentative text.

For an argumentative text, three elements are important:

- a) The thesis (what the author wants to argue about) - similar to the author's intentions, but not identical. Often the intentions of the author are to convince you of an idea, while the thesis is what the author want to convince you about.
- b) The arguments presented.
- c) The examples employed to convince you.

Slide 30: The parts of an argumentative text.

The teacher should explain what all of those parts should contain:

- a) The exposition of the problem;
- b) The thesis;
- c) The eventual antithesis;
- d) The confutation of the antithesis;
- e) The proof of the thesis;
- f) The conclusion.

[IMPORTANT] The part that will follow is in common with MODULE 2 on critical thinking.

In case a student already completed such module, this will only be a refreshing part, where the teacher must check whether the student still remembers how to formally analyse an argument.

Slide 31: Introduction to argument recognition.

The teacher should introduce the concept of argument recognition in order to teach the students how to recognize an argumentative text and how to suitably transform such argument in order to formally analyse it.

Slide 32: How to recognize an argument (Part 1).

Refer to the lecture notes of module 2.

Slide 33: How to recognize an argument (Part 1).

Refer to the lecture notes of module 2.

Slide 34: How to recognize an argument (Part 2).

Refer to the lecture notes of module 2.

Slide 35: The various aspects of meaning.

Refer to the lecture notes of module 2.

Slide 36: Rethorical meaning.

Refer to the lecture notes of module 2.

Slide 37: Implicational meaning.

Refer to the lecture notes of module 2.

Slide 38: The standard form of an argument (Part 1).

Refer to the lecture notes of module 2.

Slide 39: The standard form of an argument (Part 2).

Refer to the lecture notes of module 2.

Slide 40: Premises and conclusions.

Refer to the lecture notes of module 2.

Slide 41: How to get rid of meaningless information.

Refer to the lecture notes of module 2.

Slide 42: Confusing Linguistic Phenomena.

Refer to the lecture notes of module 2.

Slide 43: Ambiguity.

Refer to the lecture notes of module 2.

Slide 44: Fuzziness.

Refer to the lecture notes of module 2.

Slide 45: Rethorical tricks.

Refer to the lecture notes of module 2.

Slide 46: Use of novelty, popularity or beauty.

Refer to the lecture notes of module 2.

Slide 47: Using compassion, piety, guilt and fear.

Refer to the lecture notes of module 2.

Slide 48: Examples.

Slide 49: Examples.

Slide 50: Final steps.

Refer to the lecture notes of module 2.

Slide 51: Exercises.

Slide 52: Exercises.

Slide 53: Exercises.

Slide 54: Exercises.

Slide 55: Exercises.

Slide 56: Exercises.

Slide 57: How to properly communicate information through a text.  
The teacher should highlight the elements that are relevant in a proper act of communication of information. In particular, the focus shall be on audience identification; information selection and clarity.

Slide 58: Audience identification.

The teacher should highlight that different types of audiences require different communication strategies. Examples should be made of potential audiences and what register and communication strategies are effective for such audiences.

Slide 59: Information selection.

The teacher should highlight that different types of information can be employed to prove a thesis or disprove an antithesis. In particular, focus should be placed on which kind of examples can be employed and which formal tools are adequate (reference to MODULE 2 if the students followed such module). The teacher should also highlight bad selection practices, e.g., generalisations based on personal experiences, myths and/or poor source selection.

Slide 60: Exposition clarity.

The teacher should highlight some common good practices to improve clarity during the presentation of information. In particular, some interesting elements are: i) following a logical structure of presentation; ii) making explicit all the implicit premises; iii) honesty; iv) complete disclosure of information.

Slide 61: Exercises.

In particular, it is advised to organize a competitive debate in order to test the students' ability to convey information succinctly but accurately and convincingly.

Slide 62: Choosing the right techniques.

This introduces the second part of the module (approx. 18 hours).

The teacher should explain that formal and informal tools can help in improving someone's competence in delivering information. Focus will also be placed on improper information transmission and conclusion drawing, i.e., fallacies. However, some emphasis should be placed on the fact that fallacies might not be as powerful as many expect.

Slide 63: Contents of the second part of the module.

- i) Why logical and informal fallacies can help in argumentative tasks.
- ii) Why fallacies are not sufficient;
- iii) Possible argumentative alternatives.

Slide 64: The pile of sh\*t theory.

The teacher should introduce the theory of the pile of sh\*t.

Such theory claims that no matter how fast you are at shovelling sh\*t, a malicious adversary will always be faster at producing more of it.

This idea is based on the fact that creating false and bad information is fast and cheap (it takes little resources to produce a complex and imprecise false information), while debunking such information is costly (both in terms of time and expertise required). This creates an unbalance towards imprecise information production, which seems to call for containment methods to limit sh\*t production or facilitating techniques to shovel such sh\*t faster and better.

The theory of fallacies helps in both directions.

Slide 65: Example to prove the theory of the pile of sh\*t.

An example should be used to fix the point. It is suggested to use an example from commonly known conspiracy theories in order to show how complicated the shovelling process is.

Slide 66: Examples taken from reasoning contexts.

Slide 67: Examples where the arguments are provably wrong.

Slide 68: Introduction to logical fallacies.  
The teacher should explain what a logical fallacy is.

Slide 69: Fallacies in relation with critical thinking.  
In case the students completed module 2, references should be made to such module. Otherwise, the teacher should contextualize the theory of fallacies inside the wider environment of critical thinking.

Slide 70: Fallacies as the absolutely perfect solutions to all reasoning problems.  
The teacher should be making references to the consideration that many authors think that fallacies are the perfect solution to the problem of improper reasoning.

Slide 71: Taking a step back.  
The teacher should highlight that the generalization over the efficacy of fallacies might be unjustified. More insight is required to understand whether they can help and to what extent.

Slide 72: Joke connected to an Italian advert.

Slide 73: The tree of fallacy theory.  
The teacher should show the students how complicated it is to navigate the tree of fallacies. Many different fallacies are studied and they all apply to really different contexts. This makes it extremely complicated and difficult to properly apply the theory, especially in a non-formal environment such as every day routines. Examples of some of the fallacies contained in the tree shall be made, showing how difficult it might be to apply those to ordinary scenarios.

Slide 74: The pile of sh\*t returns.  
The teacher should show that this difficulty in applying fallacy theory can cause the pile of sh\*t to return, given the slopiness of the applicability of such theory.

Slide 75: Quote from Heinlein.  
This quote should be used to highlight that not everything in real-life scenarios can be analysed formally and precisely.

Slide 76: Therefore, not everything is fallacious, even when it is.  
The teacher shall show how to extend the fact that not everything is formal to the fact that fallacy theory might not always be the appropriate tool to apply.

Slide 77: The fallacy fork theory.  
Either:  
1) Arguments are absolutely rigorous and thus fallacy theory applies (but there are not many examples of fallacious reasoners).  
or  
2) Arguments are not rigorous and thus fallacy theory does not apply.

Slide 78: Examples of the fallacy fork theory.  
The teacher can choose some examples of fallacies that might be appropriate to examine certain situations but not other. The examples chosen in the slides are connected to famous fallacies that are described in critical thinking books and are said to apply very often. It is however shown that such applicability is not so straightforward.  
In slide 78, the Post hoc ergo propter hoc fallacy is described. If something happens after something else, there must be a cause



connecting the two.

Slide 79: Different interpretations connected to the post hoc ergo propter hoc.

In the first example, those who believe in homeopathy are often victims of the post hoc ergo propter hoc: if I feel better after I took the homeopathic medicine, it must be that the medicine is effective in treating my illness (even though simple placebo effects or self-healing is indeed the reason you feel better).

In the second example, the fact that you ate a wild mushroom is used by a doctor as a plausible cause of your illness. Even though it is not proved that the mushroom did indeed cause your illness, it is very likely and treatment are employed based on such assumption. In this case, nobody would claim that the doctor committed a fallacy, even though the structure of the reasoning is similar to the one connected to homeopathy.

Slide 80: Ad hominem.

The reputation of s/he who presents the argument has no effect of the correctness of the argument.

Slide 81: Example.

In the first example, Greg Popovich (considered one of the best basketball trainers in the world) presents his arguments in favour a specific play in a basketball game. His authority obviously increases the chances that his argument is correct and should be taken into consideration.

In the second example, Mirko Tagliaferri (a pretty naive basketball trainer) proposed the same argument for the play in a different game. In such case, the argument should be analysed as it is, without taking into consideration the authority of the proponet, since he has none.

Slide 82: Argumentum ad ignorantiam.

Missing evidence does not mean that there is evidence that something is missing.

Slide 83: Example.

In the first example, the fact that there is no scientific evidence that aliens exist is a strong argument in favour of the fact that they might not exist.

In the second example, the fact that there was no scientific evidence of evolutionary theory, could not be used to prove that evolutionary theory was false.

Slide 84: Discussion as an alternative shovelling tool.

Critical discussion and confrontation can be used to improve the quality of information circulating on the various media.

Slide 85: Using opposite views to help the debate.

Forcing oneself to be the devils advocate can improve the quality of information transmitted.

Slide 86: Benefits of critical discussion.

- a) Understanding the opposite view to better understand our own views.
- b) Implicit premises reduction. Through confrontation, all implicit premises become explicit.
- c) Awareness of social bubbles and resonating chambers.

Slide 87: Conclusion.

The students shall also be invited to bring real life examples of how fallacies might be misapplied to scenarios where the arguments are not presented formally.