

Art-based lesson on Problem Solving

Group lesson guide for
Adult Educators

Learning objectives and outcomes of this lesson:

OBJECTIVES	OUTCOMES
To train on how to approach problems in a creative way through and inspired by the observation and analysis of a piece of art/literature.	Learners will be more able to face a new and apparently unmanageable situation according to the usual ways she/he has learned and known, by implementing a "creative effort" aimed at identifying new strategies capable of directing them to the best.
To train on the “problem solving” process: identify a problem and establish a goal, analyse the obstacles, formulate hypotheses, evaluate solutions and act.	Learners will be more to approach and solve a problem by applying a strategic process.
To provide learners with the skill of changing their way of behaving, seeing and feeling things to ease the achievement of an objective.	Learners will have understood how to use a “think out of the box” strategy in order to analyse and find solution to a problem looking at it under a different light and from different perspectives.

Methods used during the lesson:



Short intros to the topic and the artworks;



Observation;



Self-reflection and self-learning;



Guided discussions.

Group Lesson Plan:

Duration: 5 hours

Necessary equipment and materials:

- A laptop and a projector
- Paper handouts with the works of art and literature to be examined
- Sheets of paper, pens and coloured pencils
- Other items to support activities such as Ice-breaking

DIGITAL SUPPORT (optional)

- For the brainstorming guided discussion: **Miro**
- For the involvement of the learners in the final evaluation phase: **Mentimeter**

Group lesson structure and materials

*Selected topic :
Problem solving*

STRUCTURE

1. Ice-breaking activities related to lead to the “problem solving” topic
2. Introduction to problem solving: what is this skill about and how do we acquire and use it?
3. Introduction to the selected piece of art/literature and analysis of the related information materials.
4. Guided discussion:
 1. Interpretation of the piece of art/literature
 2. Analysis of the piece of art/literature’s elements
 3. The topic through the lens of the piece of art/literature
5. Conclusions
6. Problem Solving skill recap

MATERIALS

1. Group lesson guide
2. Database of pieces of art/literature
3. Links to sources and additional information materials about the piece of art/literature
4. Methodology how to apply arts and literature for education, creativity and innovativeness

Suggested timetable for the lesson

N.	Activities	Dedicate time
1	Ice-breaking activities related to lead to the “problem solving” topic	90 minutes
2	Introduction to problem solving: what is this skill about and how do we acquire and use it?	30 minutes
3	Introduction to the selected piece of art/literature and analysis of the related information materials.	45 minutes
4	Guided discussion: <ol style="list-style-type: none"> 1. Interpretation of the piece of art/literature 2. Analysis of the piece of art/literature’s elements 3. The topic through the lens of the piece of art/literature 	1.45 minutes
5	Conclusions	30 minutes
6	Problem Solving skill recap	30 minutes
	COMPLETE LESSON PLAN	5 hours

1. Ice-breaking activity

The ice-breaking activity will serve to lead the conversation towards the “problem solving” topic. You should ask questions to share their point of view, their experience and knowledge about the topic:

- a. When you meet a challenge or you have to find a solution to a problem, how do you approach the situation?
- b. Do you know about “problem solving” skill?
- c. Have you had experience of applying “problem solving” to complex situation?

The ice-breaking activity can be led through the use of games to make learners feel free to share their thoughts and brainstorm. Dixit cards game, here presented, is an effective tool for this activity, but educators can freely creatively use other tools they feel comfortable with.

Dixit cards

Spread the cards with the images facing upwards on the table. Let everyone in the group choose one card that fits how they currently feel or what their expectations are for the rest of the training. Give them some time and when each person has a card sit around the table or in a circle. Go around, let everyone present themselves and let them explain why they took this card, what kind of feelings or emotion that image has evoked. It’s an easy way to get people talking as they have an image that supports their story. The game creates an atmosphere where people listen to each other and talk about personal feelings in a safe environment.

2. Introduction to the topic

PROBLEM SOLVING

You should introduce the topic to the learners:

In problem solving the person is faced with a situation that is new and unmanageable according to the usual ways she/he has learned and known. What is therefore required in these situations is to implement a real "creative effort" aimed at identifying new strategies capable of directing us to the best.

To come to a solution, a change in our way of seeing and feeling things or in our behaviour is necessary, in order to allow us to achieve the objectives.

"Everyone is a genius. But if you judge a fish by its ability to climb trees, it will spend its whole life believing that it is stupid.

We cannot expect things to change if we keep doing the same things

Creativity is contagious. Pass it on".

(Cit. Albert Einstein)

What is the process of the problem solving skill?

1. Define the problem
2. Establish our goal
3. Analyze the obstacles
4. Formulate hypotheses for solving the problem
5. Evaluate the solutions
6. Taking a decision
7. Act

3.1 Brief introduction to the artwork and observation

ARTWORK CHOSEN FOR A TECHNICAL/SPECIFIC APPROACH

ARTWORK 1: Architecture

TITLE: Dome of Santa Maria del Fiore Cathedral

ARTIST: Filippo Brunelleschi (1420-1436)

DESCRIPTION:

The dome of Santa Maria del Fiore is the largest masonry dome ever built in the world, it is unique.

The dome's main characteristic is its complex polyhedral configuration.

The height of the tax floor and its octagonal shape forced Filippo Brunelleschi to choose a pointed arch shape, instead of the hemispherical one. He also opted for a double dome in order to lighten the load.



3.1 Brief introduction to the artwork and observation

ARTWORK CHOSEN FOR AN ABSTRACT/METAPHORICAL APPROACH

ARTWORK 2: Painting

TITLE: "Oedipus and the Sphinx"

ARTIST: Giorgio de Chirico (1864)

DESCRIPTION:

The painting represents the mythological story of the encounter between Oedipus and the Sphinx.

Oedipus manages to solve the enigma posed by the Sphinx.

-“What is the animal that walks with four legs in the morning, at noon with two, and in the evening with three?”

-“It is the man, who as a child walks on all fours; when he is mature, he walks upright on two feet, and as an old man he must use a stick as a support to walk”.



4.1 Guided discussion: Interpretation

How to interpret artworks

You should ask learners to describe what they see / feel / understand from the selected piece(s) of art/literature.

The focus of the discussion is on sharing personal views, feelings and thoughts of participants about the piece(s) of art/literature. The purpose is to encourage participants to share their opinion by pointing out that there are no wrong answers.

Possible questions to be chosen and developed according to the chosen of art/literature chosen:

- a. What does this piece of art makes you think and feel?
- b. What do you think the artwork wants to communicate?
- c. What in your opinion is the focus of the artist's attention?
- d. Which are the challenges you thin the artists faced in the realization of the piece of art/literature?

4.2 Guided discussion: Analysis

How to analyze artworks

You should guide the analysis of the elements that compose and/or are represented in the piece of art/literature. You should guide learners in a discussion leading to the entrepreneurial topic under discussion through the analysed elements.

Possible questions for *Guided discussion on the observed/introduced works*:

1. Is there something in this piece of art that makes you think of some of the characteristics of the problem solving skill?
2. Are there elements in this piece of art which you can relate to the problem solving process? Which are they and how/where can you find them?
3. Would you be able to describe the problem solving process through this piece of art?

Support tools

Optionally you could research and provide the learners with the support analysis tools chosen according to the topic and the piece of art/literature under observation.

Those will be combined with the additional information materials about the pieces of art/literature in the database.

ART and LITERATURE TOOLS

How to analyze a piece of art/literature?

Primarily

- Self reflection through a piece of art/literature
- Color and shapes symbolism related according to the context (in art)
- Plot structure or writing techniques (in literature)

Secondarily

- Historical and environmental context
- Art piece and/or artist history

BUSINESS TOPICS ANALYSIS TOOLS (theoretical framework)

How to analyze the topic?

Key points of business and marketing strategy entrepreneurial skill processes and practical examples.

4.3 Guided discussion: Problem solving through the lens of the piece of art

You should guide learners in a discussion about the topic through the lenses of the art works.

Opening question: Where can we find the problem solving characteristics or processes in this piece of art ?

To guide this discussion you could use the support of one or more of the following activities selected by the educator:

Q&A sessions – about the topic and about the pieces of art/literature

Mind maps on the topic of the activity

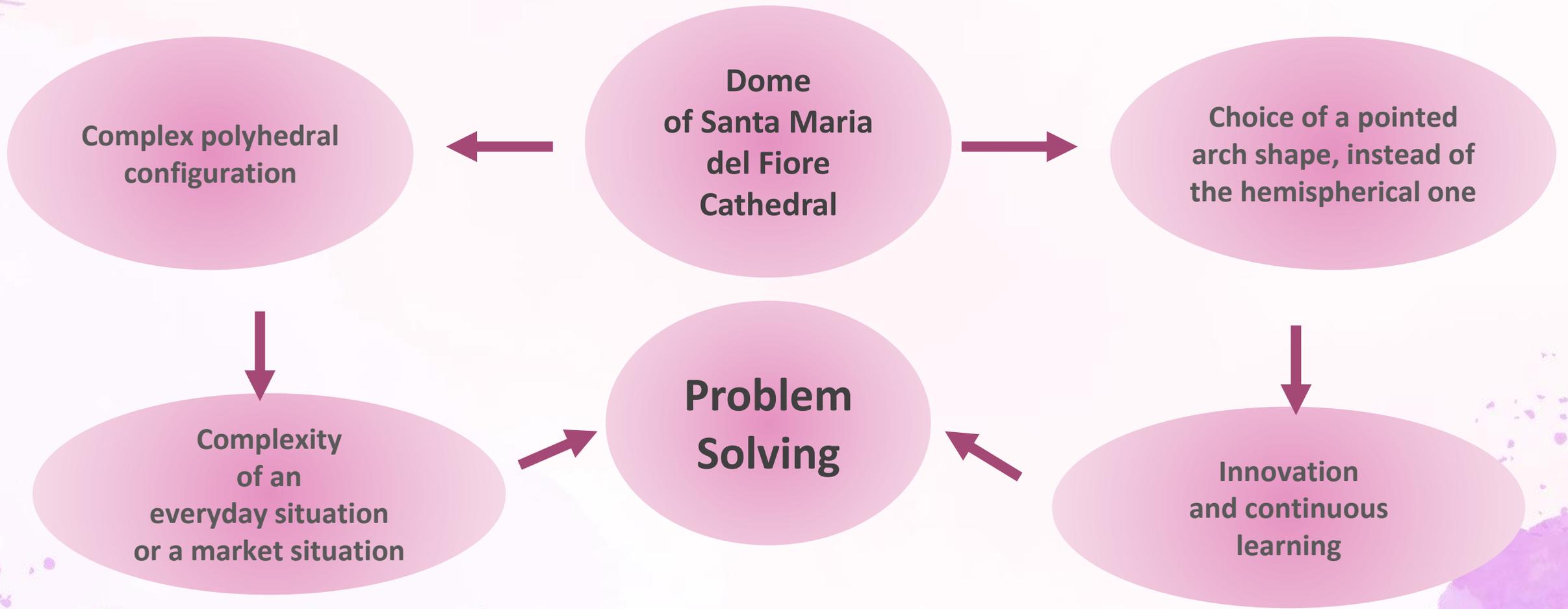
Questions cards about the pieces of art/literature

Quizzes on the topic of the activity and on the pieces of art/literature

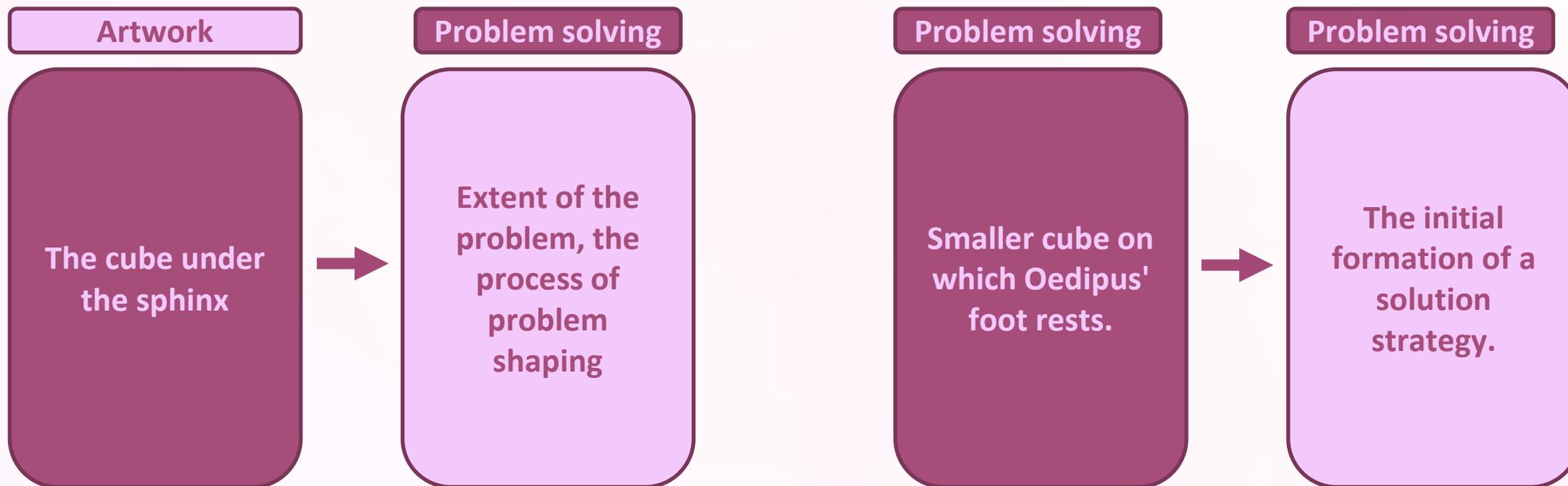
Practical exercise to draw/write their own version of artwork on the topic of the activity.

You should collect answers from the learners and listen to their different analysis and elaborations.

Mind map reference (Artwork 1)



Quiz cards reference (Artwork 2)



5. 1 Conclusions (Artwork

1)

At the end of the activity, you could start guiding the group into his/her interpretation of the artwork, explaining how he/she sees the topic through the lenses of the art/literature under observation.

Why did we chose this piece of art? (The interpretation in the database is optional to use, and can be substituted by the educator's interpretation).

We can find problem solving elements in the dome itself:

- 1. Innovation and continuous learning are key to entrepreneurship and problem solving.**
- 2. The polyhedral configuration of the dome can be seen as the complexity of an everyday situation or a market situation. As much as it may seem hard to find a way through a situation, a market, a target, you can exploit the adversity, build on it and achieve something new and unique out of it.**

Problem Solving skill recap: it is an entirely rational and linear process, like a kind of "thought assembly line". The ability of Problem Solving consists in integrating our resources, the logical ones with the creative ones, in the best possible way, which is essential to come to the solution. Creativity and intuition are the heart of Problem Solving. After identifying the problem, our goals and the real obstacles, we need to tap into what we know and know how to do, but then we need to let our minds free to make connections and generate ideas.

5. 2 Conclusions (Artwork

2) *At the end of the activity, you could start guiding the group into his/her interpretation of the artwork, explaining how he/she sees the topic through the lenses of the art/literature under observation.*

Why did we chose this piece of art? (The interpretation in the database is optional to use, and can be substituted by the educator's interpretation).

Besides the enigma itself, the element to focus on in the painting is presented by the cubes on which the sphinx and one of Oedipus' feet are placed.

The cube under the sphinx represents the extent of the problem, the process of problem shaping; the smaller cube on which Oedipus' foot rests represents the initial formation of a solution strategy.

One should also focus on the position of the mannequin, which 'stretches towards the problem' even though it is of higher level. This can be a clear reference to introspection and the attitude needed for solution finding.

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6. Problem Solving skill recap

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