



## **Module 3: Innovation**

### **Topic 3.3: Techniques for teaching innovation**

#### **Video lesson**

- <https://youtu.be/lv62mjutT-8>

#### **Reading material**

- Introductory text
- Examples of innovation exercises in a classroom

# TECHNIQUES OF TEACHING INNOVATION

## INTRODUCTION

In this topic, we address the techniques that will help you to inspire curiosity and innovativeness in your students. Brian W. Mattimore in his book *Idea Stormers: How to Lead and Inspire Creative Breakthroughs* identifies the seven creative mind-sets and explores the ways of applying them to inspire the creativity of oneself and of those you work with. These mindsets cannot be neatly listed, they overlap as such is the *modus operandi* of the creative mind.

Without curiosity, which is a creative mind-set number one, the creative process never has the raw material it needs. Thinking openly can be viewed as quieting the opinions of the judgmental mind to allow the creative mind the time and space it needs to generate interesting insights, associations, or connections. Embracing Ambiguity is the capacity to entertain contradictory, ambiguous, or incomplete information. Finding and transferring principles to the new field is the fourth creative mind-set. Searching for Integrity is the desire to discover and insight or connection that will unite the seemingly disparate elements into a single integrated, conceptual whole. Knowingness is the confidence to know that with enough creative attention, focus and effort, sooner or later you will solve your creative challenge. Ad world creating is the most purely imaginative creative mind-set.

Brainstorming is a group idea generation technique, developed in late 1930 by Alex Osborne which was followed by hundreds of other idea generation techniques now known as ideation techniques. Today several new techniques can be used in different sessions according to the creative task. Brainwalking and brainwriting for example are close »cousins« of brainstorming. At our consulting and educational work, we can use random or focused ideation techniques. Random techniques, such as randomly picking a word from the dictionary, or going to the museum while searching for an idea, can occasionally bring breakthroughs but often they can as well be a waste of time.

In addition to basic brainstorming, one can choose among four classes of focused and customizable ideation techniques to tackle different creative challenges:

1. Questioning: questioning assumptions, twenty questions, problem redefinition;
2. Metaphorical and linguistic: category analogues and idea hooks, headliner, company takeover, semantic intuition
3. Visual: picture prompts, magazine rip and rap, collaging, positioning continuums
4. Wishing, role play, and fantasy: wishing, day-in-life, worst idea

## INVITATION TO THE TOPIC

Please, watch the video we included and read the suggested article as well as the recommended worksheets in the next section. You can also look at the PowerPoint presentation. After that, you are invited to participate in the forum, where we would like you to share your ideas and experiences on creative teaching.

INNOVATION EXERCISE (IDEA: ALENKA GRMEK)

Content	Description
Skills category	Innovation
Other soft skills to gain or strengthen in students	Innovation
Learning activities that enable the acquisition or strengthening of skills	Brainstorm to find the worst idea
The objective of learning activities in terms of teaching soft skills	Developing innovation in the event of finding the worst idea for a new offer to students
Work format	Individual work, exchange of views within the Group
Teaching methods used	Worst idea
Time of implementation of the activity	15 minutes + 15 minutes
Accessories used	ICT, Moodle, forum
Activity implementation steps	As part of the remote work, students wrote a bad idea for the students in the online forum. Based on the record, the possibilities for creating good ideas have opened up.
Implementation guidance, special advice and warnings	I did the rehearsal at the beginning of the meeting. We have not commented on the quality of bad ideas.

INNOVATION EXERCISE (IDEA: ALENKA GRMEK)

Content	Description
Skill category	Innovation
Other soft skills to gain or strengthen in students	Innovation
Learning activities that enable the acquisition or strengthening of skills	Encouraging and creating new ideas
The objective of learning activities in terms of teaching soft skills	Development of innovation in the case of verification of assumptions
Work format	Individual work, exchange of views within the Group
Teaching methods used	Verification of presumptions
Time of implementation of the activity	15 minutes + 15 minutes
Accessories used	ICT, Moodle, forum
Activity implementation steps	In the context of remote implementation, I wrote down some assumptions in the forum, which were the starting point for generating new ideas. I wrote, for example, the assumption "It's easier to sell during the conjunctivitis period than during the recession."
Implementation guidance, special advice and warnings	Openness of the debate leader to different views, opinions, views, experiences.

INNOVATION EXERCISE (IDEA: IVA KAPLAN)

Content	Description
Skill category	Innovation
Other soft skills to gain or strengthen in students	Innovation, creativity
Learning activities that enable the acquisition or strengthening of skills	As part of the business plan, they look for new uses of the object and determine the target public market for the new use of the object
The objective of learning activities in terms of teaching soft skills	<p>Students know how to</p> <ul style="list-style-type: none"> <li>- Draw up an enterprise plan</li> <li>- Find new uses of an object</li> <li>- Understand the link of product characteristics with the target public</li> <li>- Gain the experience their own idea, which is the first</li> </ul>
Work format	Frontal, brainstorming, individual, reporting
Teaching methods used	Introductory frontal presentation of tasks and definitions of public goals, method brainstorming, planning, organization of materials
Time of implementation of the activity	3 hours
Accessories used	Image materials - stumps Enterprise folder
Activity implementation steps	<p>Theoretical introduction part of the activity in the Enterprise Folder - product creation and a market for it.</p> <p>Talk about ideas, about new uses.</p> <p>Warming up by brainstorming on possible use of a paper clip.</p> <p>Presentation of the task: Free stumps are available during the forest cleaning, which are delivered free of charge to the entrepreneur with a good idea. We reviewed the usual uses of stumps and the task required creative new use, which they prepare for the market through procedural, cost and organizational work.</p> <p>They need to find a new product and anticipate a price for their target audience of customers who could use the product and justify production.</p>
Implementation guidance, special advice and warnings	Allow enough time for the creative process. Separate the calculative part from the creative.

EXERCISE IN INNOVATION AND TEAMWORK (IDEA: NATAŠA SEVER)

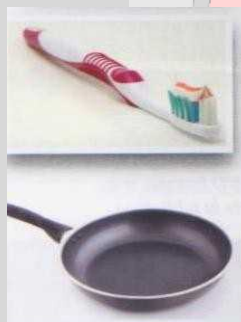
Content	Description
Skill category	Innovation, Teamwork
Other soft skills to gain or strengthen in students	Teamwork, innovation, creativity
Learning activities that enable the acquisition or strengthening of skills	creative and productive learning activity with interesting content
The objective of learning activities in terms of teaching soft skills	Promoting creativity and innovation, developing the ability to work in a pair (team).
Work format	working in pairs
Teaching methods used	The method of working with the paintings.
Time of implementation of the activity	1 school lesson
Accessories used	picture (photo), pens, markers, additional sheets of paper to record ideas
Activity implementation steps	<ul style="list-style-type: none"> <li>– The teacher introduces the course of activities and the purpose of the activities to the students</li> <li>– Students form couples</li> <li>– The teacher distributes to each couple a picture of a building in the local environment, which has meaning for cultural heritage but is in dilapidated or bad condition</li> <li>– Invite students to think about how to rebuild the building and write their ideas on a sheet of paper</li> <li>– On the picture of a decaying building they draw their ideas or design the building according to their wishes</li> <li>– Students can write ideas about how to use such a building, market it, give it a broader meaning to the surroundings</li> <li>– The students present the final product to others and hang the products in classroom</li> </ul>
Implementation guidance, special advice and warnings	It would take more than one school hour to carry out the activity. Activism can be carried out as a teamwork, as part of a project day, etc.

INNOVATION EXERCISE (IDEA: KATARINA GOSPODARIČ)

Content	Description
<b>Skill category</b>	Innovation
<b>Other soft skills to gain or strengthen in students</b>	innovation, creativity, decision-making ability, collaboration, argumentation, evaluation, entrepreneurship, critical thinking
<b>Learning activities that enable the acquisition or strengthening of skills</b>	<p>Students:</p> <ul style="list-style-type: none"> <li>– describe the object/product and its usefulness.</li> <li>– find (invent) new, innovative ways of using everyday objects</li> <li>– write a commercial advertisement for an unusual device and its usefulness</li> <li>– invent a new device/ product, draw it and describe its usefulness</li> <li>– compare and evaluate</li> </ul>
<b>The objective of learning activities in terms of teaching soft skills</b>	<p>A student can:</p> <ul style="list-style-type: none"> <li>– recognize usability, good and bad properties of objects/products/devices</li> <li>– write an effective advertisement for a product</li> <li>– find, imagine new ways to use everyday objects</li> <li>– create a new device/product and explain with firm arguments its usefulness</li> </ul>
<b>Work format</b>	individual, in pairs or small groups (3-4 students), forms of work are adapted to the number of
<b>Teaching methods used</b>	describing, interviewing and discussion, working with images, observing, drawing
<b>Time of implementation of the activity</b>	45 minutes
<b>Accessories used</b>	images of everyday objects, images of unusual devices, paper, stylus, crayons

<p><b>Activity implementation steps</b></p>	<ol style="list-style-type: none"> <li>1. We display 3 to 4 items for everyday use and invite students to describe them: shape, size, colour, material and usability.</li> <li>2. Students individually (or in pairs or in groups) find, invent, and present new ways of using these objects to their classmates.</li> <li>3. Now we show students pictures of unusual objects or devices. They select a picture of one product and write an advertisement for publication in a newspaper in which they describe the object and highlight the good characteristics of its use, which will convince the customer to buy the product.</li> <li>4. We display the advertisements; students look at them and decide which product they would buy.</li> <li>5. The activity can be extended with an additional task. Students now invent a new product that does not exist and write a similar advertisement. They also draw the product.</li> </ol>
<p><b>Implementation guidance, special advice and warnings</b></p>	<p>Activity can be very adjusted depending on the topic and number of students.</p>

Annexes for the teaching of innovation:






## INNOVATION EXERCISE (IDEA: SUZANA ANDOLJŠEK)

Content	Description
<b>Skill category</b>	Innovation
<b>Other soft skills to gain or strengthen in students</b>	innovation, critical thinking, entrepreneurial thinking, creativity, collaboration with each other, teamwork
<b>Learning activities that enable the acquisition or strengthening of skills</b>	Students: <ul style="list-style-type: none"> <li>– choose an activity for an imaginary company, review activities and try to present something new, present their ideas,</li> <li>– write a script for the ad and presentation of the activity</li> <li>– Present ways to shoot an ad for their business</li> </ul>
<b>The objective of learning activities in terms of teaching soft skills</b>	Students: <ul style="list-style-type: none"> <li>– know how to present the activity of the company</li> <li>– know the importance of each activity</li> <li>– understand the importance of innovation</li> <li>– know the importance of entrepreneurship</li> </ul>
<b>Work format</b>	working in pairs, individually, groups (depending on the number of students)
<b>Teaching methods used</b>	explanation, interview, description, discussion, debate, case study
<b>Time of implementation of the activity</b>	two school hours
<b>Accessories used</b>	computer, paper, pencil, magazines, professional newspapers
<b>Activity implementation steps</b>	through explanation and examples, I present the company's activities, highlight the importance of innovation in choice. Students are divided into groups or pairs and choose an activity for an imaginary company, try to find new ideas. Finally, they present the selected activity and idea for the ad to their classmates.
<b>Implementation guidance, special advice and warnings</b>	The teacher introduces the students to the way of working, the importance of choosing the right activity, presents examples of good practices, constantly participates in the selection and presentation of activities, in the presentation of scenarios for the ad, points out mistakes.

INNOVATION EXERCISE (IDEA: KATARINA GOSPODARIČ)

Content	Description
Skill category	Creativity
Other soft skills to gain or strengthen in students	creativity, decision-making ability, cooperation
Learning activities that enable the acquisition or strengthening of skills	<p>Students:</p> <ul style="list-style-type: none"> <li>– storming ideas on the subject of Travel</li> <li>– think of one anecdote that has occurred to them on their travels</li> <li>– create a title for this anecdote.</li> <li>– write an anecdote in which they must use the given words</li> <li>– read their anecdote to classmates</li> <li>– compare and evaluate the articles</li> </ul>
The objective of learning activities in terms of teaching soft skills	<p>A student can:</p> <ul style="list-style-type: none"> <li>– Invoke vocabulary from memory in conjunction with a specific topic</li> <li>– create a title for the story</li> <li>– create (write) a story in which he makes meaningful use of a word that he does not choose</li> <li>– evaluate and evaluate the composition</li> </ul>
Work format	group, individual
Teaching methods used	storming ideas, interviewing, writing, reading, giving feedback
Time of implementation of the activity	45 minutes
Accessories used	whiteboard, paper, pen
Activity implementation steps	<ol style="list-style-type: none"> <li>1. We select the theme of the article, which is written in the centre of the board (e.g. Travel). We whirl through ideas together with students and write down words related to the topic in the form of a thought pattern.</li> <li>2. Students close their eyes and try to remember one anecdote that occurred to them on a trip. Or they can make it up.</li> <li>3. Then they think about the title of this anecdote and write it down.</li> <li>4. The teacher, together with the students, selects 5-6 words from the thought pattern.</li> <li>5. Students must write their own anecdote and use all the words they have chosen in the story.</li> <li>6. After writing, students read each other's stories.</li> </ol>



	<ol style="list-style-type: none"><li>7. The teacher, together with the students, shall determine the criteria by which the composition would be assessed.</li><li>8. Students exchange articles and evaluate them, then collect all the grades and get the best anecdote. It is recommended that all students evaluate all classmates. If the group is too large, divide it into smaller groups.</li></ol>
<b>Implementation guidance, special advice and warnings</b>	The activity is ready for teaching foreign languages, so students write a story in a foreign language. However, it can also be adjusted for other subjects.