

2021-1-PL01-KA220-YOU-000028673

**Creative Box: Promoting the innovative approaches to  
building educational formats in youth work**

**IO1 – TEACHING MATERIAL**

“Innovation in Youth education in digital  
era: best practice, educational products”

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## Introduction

In the modern world, almost everything requires the use of digital technologies. They are also crucial in the process of learning and creating, because they provide us with unlimited resources of knowledge. Also in the field of creativity, the support of new technologies is extremely helpful. Digital tools allow us not only to look for inspiration on the web, but also provide us with ways to develop our own creativity. Young people, as the group most familiar and comfortable with the Internet, should be encouraged to develop their skills through its use. In the education of young people, there is no time to lag behind and refuse to work with new technologies - the future is today, as the popular slogan says - education should be the first field that fully follows this trend.

## Content

### Topic 1. What is the ideal educational product for youth?

Definition of creativity by Robert E. Franken (*Human Motivation*, 3rd edition):

“Creativity is defined as the tendency to generate or recognize ideas, alternatives, or possibilities that may be useful in solving problems, communicating with others, and entertaining ourselves and others. (page 396)

Three reasons why people are motivated to be creative:

- need for novel, varied, and complex stimulation
- need to communicate ideas and values
- need to solve problems (page 396)

In order to be creative, you need to be able to view things in new ways or from a different perspective. Among other things, you need to be able to generate new possibilities or new alternatives.”



Take a quiz and find out how creative you are!  
(<https://www.kellogg.northwestern.edu/faculty/uzzi/ftp/page176.html>)

Creativity is not innate. Although each of us may be born with predispositions for creative and innovative thinking, a lot depends on ourselves. Creativity can and should be developed!



How to boost your creativity?

1. Commit Yourself to Creativity - Set goals, enlist the help of others, and put aside time each day to develop your skills.
2. Reward Your Curiosity - Give yourself the opportunity and the time to explore new topics.

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3. Take Risks to Build Creativity - Although your efforts may not lead to success every time, you will still be boosting your creative talents and building skills that will serve you well in the future.
4. Overcome a Negative Attitude - When you find yourself dwelling on negative thinking, make an active effort to challenge those faulty ideas and replace them with more realistic or positive ones.
5. Fight Fear of Failure - Remind yourself that mistakes are simply part of the process.



For more information on developing creative thinking, watch a TEDTalk! ([https://www.youtube.com/watch?v=bEusrD8g-dM&ab\\_channel=TEDxTalks](https://www.youtube.com/watch?v=bEusrD8g-dM&ab_channel=TEDxTalks))

Why is it important to teach creativity?

1. Creativity motivates youth to learn. Decades of research link creativity with the intrinsic motivation to learn. When students are focused on a creative goal, they become more absorbed in their learning and more driven to acquire the skills they need to accomplish it.

Students are most motivated to learn when certain factors are present: they're able to tie their learning to their personal interests, they have a sense of autonomy and control over their task, and they feel competent in the work they're doing. Creative projects can easily meet all three conditions.

2. Creativity lights up the brain. Teachers who frequently assign classwork involving creativity are more likely to observe higher-order cognitive skills — problem solving, critical thinking, making connections between subjects — in their students. And when teachers combine creativity with transformative technology use, they see even better outcomes. Creative work helps students connect new information to their prior knowledge.

3. Creativity spurs emotional development. The creative process involves a lot of trial and error. Productive struggle — a gentler term for failure — builds resilience, teaching students to push through difficulty to reach success. That's fertile soil for emotional growth. Creativity gives students the freedom to explore and learn new things from each other.

4. Creativity can ignite those hard-to-reach students. Many educators have at least one story about a student who was struggling until the teacher assigned a creative project. When academically disinclined students are permitted to unleash their creativity or explore a topic of personal interest, the transformation can be startling. Some students don't do well on tests or don't do well grade-wise, but they're super-creative kids.

5. Creativity is an essential job skill. According to an Adobe study, 85% of college-educated professionals say creative thinking is critical for problem solving in their careers. And an analysis of LinkedIn data found that creativity is the second most in-demand job skill (after cloud

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computing), topping the list of soft skills companies need most. As automation continues to swallow up routine jobs, those who rely on soft skills like creativity will see the most growth.



Exercise. Recall a situation where creative thinking turned out to be the key to success. It could be a story from your life or something you heard on TV or read in a book. Share the most unusual example you can think of.

## Topic 2. Review of methods of creativity development.

Below is a list of 40 methods of creativity development. Detailed descriptions of each are provided in the additional course materials. As you read them, write down notes and observations in the table, e.g.



- Have you heard of this method?
- In what situation would you use this method?
- What interested you in this method?

Name of the method	Notes
Brainstorming (Alex Osborne)	
Synectics (William Gordon)	
Morphological analysis (Fritz Zwicky)	
Focal object method (Ch. Whiting)	
The method of lateral thinking (E. De Bono)	
Tools of lateral thinking (E. De Bono)	

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PMC method "Plus, minus, interesting" (E. De Bono)	
The Six Hats of Thinking Method (E. De Bono)	
Mine-mapping (Intelligence maps) (T. Busen)	
Creative intelligence cards (T. Busen)	
The method of associations	
The method of garlands of associations	
Bisociation method (A. Kestler)	
Method of analogies	
Random word method (E. De Bono)	
Metaphor method	
Metaphorical thinking (G. Morgan).	
Visual thinking (P. McKim)	

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The method of forced relations	
List of control questions (D. Poya).	
Checklist (A. Osborne)	
List of control questions (T. Eiloart).	
SCAMPER	
Phoenix Checklist	
Heuristic question method, Kipling method (5Ws / H)	
The Five Why Method	
Desirable thinking	
The method of "Blooming Lotus" M. Mikalko	
The method of fictional characters	
And what if?	

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Freewriting-free writing	
Dream magazine	
K. Jung's test - 16 associations	
Don Cobberg, Jim Bagnell - a universal traveler	
Disney Creative Strategy (R. Dilts)	
Game perception (G. Left)	
"TRIZ" (GS Altshuller)	
The method of inversion or treatment as a method of creative problem solving	
Transform (D. Ayan, D. Berg)	
The reframing matrix (M. Morgan)	

### Topic 3. Session 1. Review of the best educational methods (in particular, the inverted method).

Let's start with a discussion! Which of the methods learned in the previous topic do you think are the most useful in education? Why do you think so?



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Now let's focus on the inverted method. We distinguish it as a separate method of stimulating creativity, but inversion, or reversal, in itself can be used for many purposes. Let's analyze a popular example of the technique from Josh Kaufman's book, "The First 20 Hours":

*By studying the opposite of what you want, you can identify important elements that aren't immediately obvious. Take white-water kayaking. What would I need to know if I wanted to be able to kayak in a large, fast-moving, rock-strewn river?*

*Here's the inversion: What would it look like if everything went wrong?*

- *I'd flip upside down underwater, and not be able to get back up.*
- *I'd flood my kayak, causing it to sink or swamp, resulting in a total loss of the kayak.*
- *I'd hit my head on a rock.*
- *I'd lose my paddle, eliminating my maneuverability.*
- *I'd eject from my kayak, get stuck in a hydraulic (a point in the river where the river flows back on itself, creating a loop like a washing machine) and not be able to get out.*

*If I managed to do all of these things at once in the middle of a raging river, I'd probably die – the worst-case scenario. This depressing line of thought is useful because it points to a few white-water kayaking skills that are probably very important:*

- *Learning to roll the kayak right side up if it flips, without ejecting.*
- *Learning how to prevent swamping the kayak if ejecting is necessary.*
- *Learning how to avoid losing my paddle in rough water.*
- *Learning and using safety precautions when rafting around large rocks.*
- *Scouting the river before the run to avoid dangerous river features entirely.*

*This mental simulation also gives me a shopping list: I'd need to invest in a flotation vest, helmet, and other safety gear.*

*Now ... I have a concrete list of subskills to practice and actions to take to ensure that I actually have fun, keep my gear, and survive the trip.*

Exercise: Read the following questions illustrating the usage of the inversion technique. Do you find answering them helpful in avoiding negative outcomes?

How do people become miserable? How do many people get into debt? How do people ruin their relationships? What habits cause people to lose money? How do people gain excess weight? Why do many people become poor?

For more details about the inversion read the article! (<https://jamesclear.com/inversion>)



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Preparation of a presentation - main task. Participants will work in groups. Each group will prepare an educational product using methods of developing creativity of their choice. What an educational product is? In this case it can be whatever idea or technique the participants will come up with. Their goal is to create something that will be helpful for them or other learners in generating new ideas, content or materials. The groups will present their outcomes in Session 2.

### Topic 3. Session 2. Presentation and discussion of educational developments of course participants.

Session 2 will be dedicated to presenting the materials created by the groups. Each group will be given about 10 minutes to show other participants what they came up with and also explain their thinking process. After every presentation a discussion will be held. All participants will be able to share their observations and remarks. The goal of the exercise is to encourage participants to put into practice methods learned during the course, as well as to further develop their critical thinking skills and creativity.

## Symbols



Practical Exercises: An exercise/ a scenario where the learner can apply the knowledge gained.



Tips: Practical tips to be followed by the learner when putting this in practice.



Extra Resources: A few extra resources on the given topic i.e., articles, videos, etc.

## Assessment

Answer the following questions to find out how much you remembered from the course.

Exercise 1. Below you see a list of tips helpful in developing your creativity. Explain why it is important to implement them.

Rewarding your curiosity	

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Taking risks	
Overcoming a negative attitude	
Fighting the fear of failure	

Exercise 2. Write down three methods of developing creativity that you remember from the course materials. Explain how they work and in what situations you would find them useful.

Name of the method	How does it work?	Example of use

Exercise 3. Watch the video with examples of three situations where a character encountered a certain problem. Think about what methods learned during the course could help them find a solution.

Link to the first video: *to be made*

Now discuss with the group and share your ideas. Then, watch the next video with examples of methods that we think may be useful to the characters. Are our answers similar?

Link to the second video: *to be made*

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