

# Encouraging Creative and Innovative Thinking in Schools

Petra Vallin



# Program

- Ladybird – getting to know each other
- Definition of creativity and why it is important
- Components of creativity

# Face-to-face sessions

|              |                         |             |
|--------------|-------------------------|-------------|
| 13.10.2025   | Po 11:40 - 14:40        | R124        |
| 27.10.2025 ? | <i>Po 11:40 - 14:40</i> | <i>R124</i> |
| 3.11.2025    | Po 11:40 - 14:40        | R218        |
| 10.11.2025   | Po 11:40 - 14:40        | R124        |
| 24.11.2025   | Po 11:40 - 14:40        | R124        |
| 8.12.2025    | Po 11:40 - 14:40        | R124        |

## CREDIT REQUIREMENTS

- 80% attendance (you can miss ONE session)
- regular assignments after each session

# Task 1:

Take a small piece of paper and write answers to the following questions:

1. What does creativity mean to me?
2. Which skills does a creative person have?

# What is creativity?

„Creativity is the act of **turning new and imaginative ideas into reality**. Creativity is characterized by the ability to perceive the world **in new ways**, to find **hidden patterns**, to make connections between seemingly unrelated phenomena, and to **generate solutions**.

Creativity involves two processes: **thinking, then producing**. If you have ideas but don't act on them, you are imaginative but not creative.“

# Creative learning – Why now?

- 50s – stated it should be prioritized in schools
- 90s – gradually starts to be placed into practice

Historical background - educational system was designed during 1st industrial revolution to train good workers but needs have changed since then.

1. Industrial age (factory workers)
2. Information age (knowledge workers)
3. Conceptual age (creators)

# Creative learning - Why now?

- K. Robinson (2011) says: „Creativity in education is crucial **to prepare children for a world we cannot envisage** – instead of remembering and following instructions, they choose instead to think.“
- The Sutton Trust (2017) warns that **15 million jobs in the UK could disappear** due to technology (robotics). New jobs will appear but we do not know them, yet.
- R. Mohammed (2018, s. 20) says that: „It is agreed that we no longer live in a world where relying solely on logic, analysis, and problem-solving skills is sufficient. In today`s rapidly changing environment, **children need a new set of skills to cope with uncertainty and complexity**, and creativity is very much a part of it.“



## COMPONENTS OF CREATIVITY

- Creativity, Culture and Education (2011), an international foundation for creative learning, **developed a framework identifying creative skills** and behaviours.
- It is advised to use this Framework in the planning and development of any teaching and learning approaches **with the aim of unlocking the creativity** of children and young people.

**But...**

...teachers know creativity is important but they do not have the time to incorporate it into their work or they are not sure how to do it.

# Myths about creativity

- It's something you are born with.
- It's for right-brained people.
- You've to be a little weird and crazy.
- It's only for people like Mozart or Einstein.



# Alternative uses (a glass)

- To make cookies
- To roll the dough
- As an aquarium
- For a candle
- To make your music louder
- To water flowers
- To serve soup
- To catch a fish
- To beg money
- To wash hair
- To take a shower
- As glasses
- To spy

# Creativity tests to unlock your imagination (e.g. alternative uses)

Developed by J.P. Guilford in 1967, the Alternative Uses Test stretches your creativity by giving you two minutes to think of as many uses as possible for an everyday object like a chair, coffee mug, or brick. Here's a sample brainstorm for "paper clip" uses:

- Hold papers together
- Cufflinks
- Earrings
- Imitation mini-trombone
- Thing you use to push that emergency restart button on your router
- Keeping headphones from getting tangled up
- Bookmark

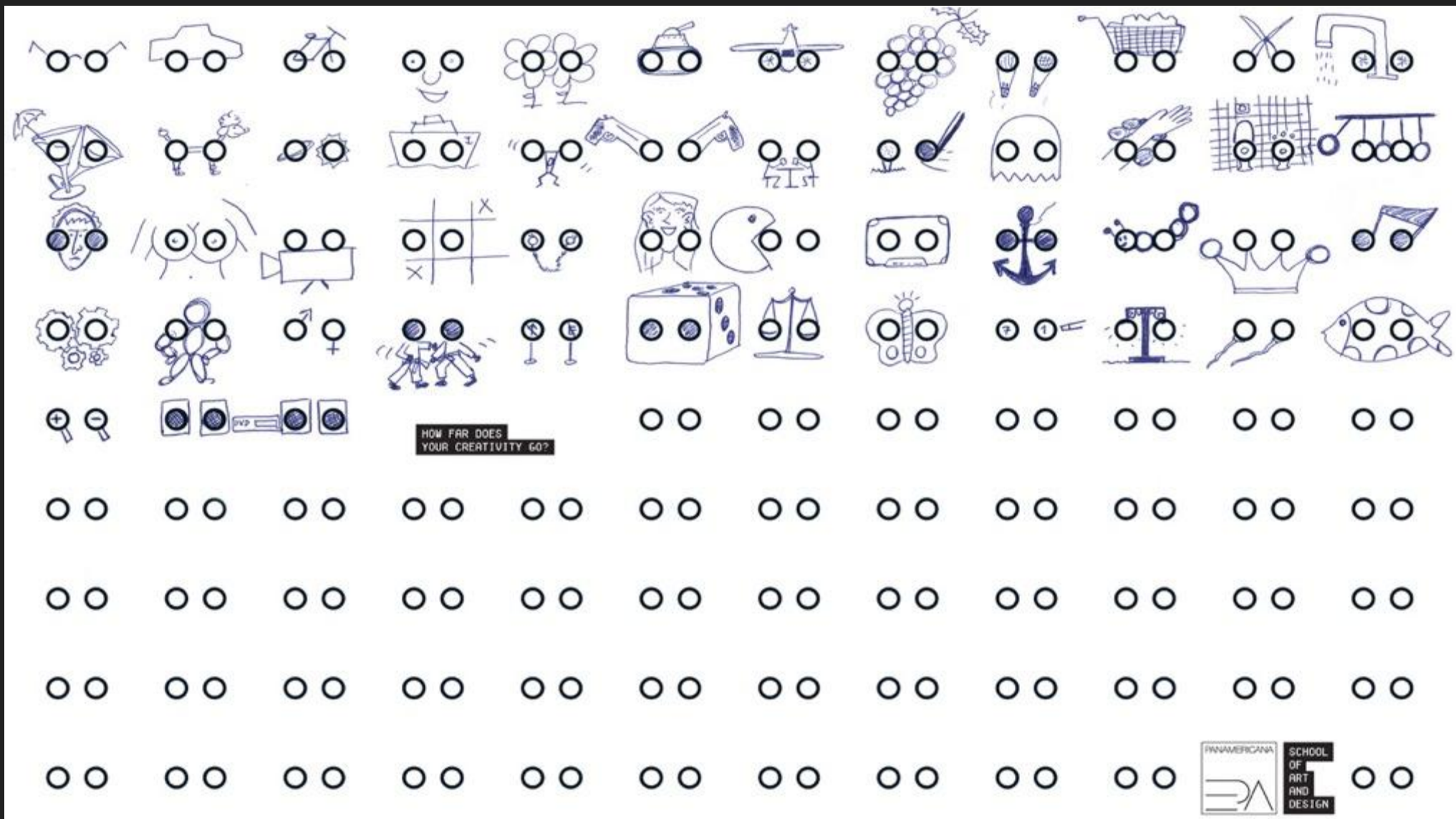
<https://99u.adobe.com/articles/7160/test-your-creativity-5-classic-creative-challenges>

# How is it measured?

The test measures *thinking* across four sub-categories:

- **Fluency** – how many uses you can come up with
- **Originality** – how uncommon those uses are (e.g. “router restarter” is more uncommon than “holding papers together”)
- **Flexibility** – how many areas your answers cover (e.g. cufflinks and earrings are both accessories)
- **Elaboration** – level of detail in responses; “keeping headphones from getting tangled up” would be worth more than “bookmark”

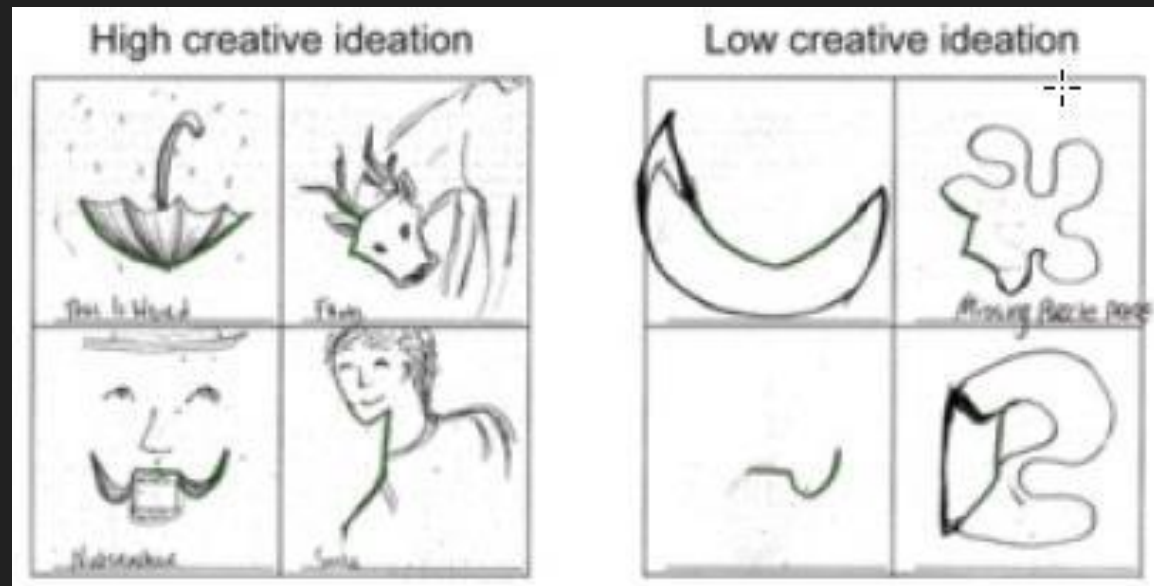




<http://theinspirationroom.com/daily/2009/panamericana-creativity-tests/>  
<http://www.kon.org/urc/v13/kissler.html>

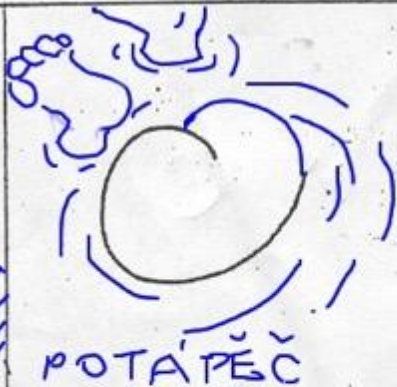
# Creativity tests: Incomplete Figures

Developed in the '60s by psychologist Ellis Paul Torrance, the Torrance Test of Creative Thinking (TTCT) sought to identify a creativity-oriented alternative to IQ testing. One of the most iconic elements of the TTCT was the Incomplete Figure test. You're given a shape like the below, and then asked to complete the image.





5.



6.



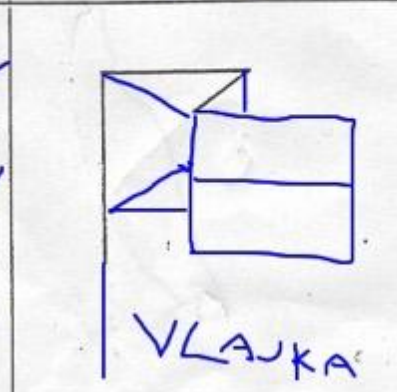
7.



8.



9.



10.

# The newest test of creativity

□ You can try it right here (it is worth trying twice): <https://www.datcreativity.com>



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# What are these exercises useful for in a class?

- To stimulate students' brain
- To boost their imagination and creativity
- To free their mind
- To help them to think out of the box
- To look at things from many different perspectives
- As a warm-up or a brain breaker

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