

# COGNITIVE CREATIVITY



## WHY DO RESEARCHERS MEASURE CREATIVITY?

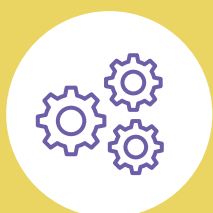
**Creativity has been identified as one of the most important skills of the 21st century.**

The development of creativity begins at an early age. Given that most children attend early childhood education and care (ECEC) during this critical period, it is important that there is consensus on how to define and assess creativity in these settings.



## WHAT IS COGNITIVE CREATIVITY?

Cognitive Creativity is a child's ability to produce new ideas and have multiple lines of thinking. This overlaps with, and sometimes may be called divergent thinking



## HOW CAN YOU MEASURE COGNITIVE CREATIVITY?

**These can be measured using several tools, such as:**

### Torrance Tests of Creative Thinking (TTCT) (Torrance, 1999)

Verbal and figural activities that assess creativity along fluency, originality, elaboration, abstractness of titles, and resistance to premature closure (Cropley, 2000).

### Alternate Uses Task

Children are asked to give uses for either familiar (i.e., box, paper, spoon) and/or unfamiliar objects (i.e., newspaper, knife, coat hanger).

### Multidimensional Stimulus Fluency Measure

This has several tasks, including one where children name all possible uses for common items.

## WHAT CAN YOU DO IN THE CLASSROOM TO MEASURE COGNITIVE CREATIVITY?

It's important for educators to observe and document each stage of children's creativity development using commonly used tools. By regularly recording these observations, you can track each child's growth. **Below are four activities to try.**

### "SQUIGGLE ART CHALLENGE"



**Objective:** Enhance visual creativity, elaboration, and originality.

#### Instructions:

- 1 Give each child a sheet of paper with a squiggle or incomplete shape drawn on it.
- 2 Ask them to turn the squiggle into a picture by adding details.
- 3 Have them explain what they created and give it a title.

**Outcome:** Encourages thinking beyond the obvious and resist premature closure in problem-solving.

### "INVENT A NEW DANCE"



**Objective:** Encourage movement-based creativity and abstract thinking.

#### Instructions:

- 1 Ask children to create a new dance move no one has ever seen before.
- 2 Have them name the move and describe what inspired it.
- 3 Encourage them to teach their move to others and combine moves into a new group dance.

**Outcome:** Fosters bodily-kinesthetic creativity and imagination.

### "NAME THAT DRAWING"



**Objective:** Develop abstractness and elaboration skills in creativity.

#### Instructions:

- 1 Give children a simple abstract drawing (e.g., a set of random lines, dots, or scribbles).
- 2 Ask them to come up with as many **different** titles for the image as they can.
- 3 Encourage them to explain why they chose each title.

**Outcome:** Builds abstract thinking and encourages multiple perspectives.

### "WHAT ELSE CAN IT BE?"



**Objective:** Improve divergent thinking by brainstorming multiple uses for everyday objects.

#### Instructions:

- 1 Show children an everyday object, such as a **paperclip, a sock, or a spoon**.
- 2 Ask them to think of as many different ways to use it as possible (e.g., "A sock can be a puppet, a hat, or a bag for marbles!").
- 3 Give a time limit (e.g., 2 minutes) and challenge them to come up with at least **5 unique uses**.

**Outcome:** Encourages fluency and flexibility in thinking, critical for problem-solving.

**Project Background:** This infographic is from a scoping review that explored 81 different research papers about teaching and assessing creativity in young children. It is part of a larger study where OISE researchers are creating evidence based professional development opportunities for teachers to learn how to develop creativity for young children.

**Citation:** Burns, S., Puri, A., Brathwaite, L., Yu, E., Hoan, E., Yasiniyan, S., White, L., Dhuey, E. & Perlman, M. (2024). *Conceptualizing and Operationalizing Creativity in Early Childhood Education and Care: A Scoping Review*. *Psychology of Aesthetics, Creativity, and the Arts* (Accepted)



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