



Brainstorming with Eureka

Unlocking creative ideas and innovations

THINKING | Creativity

→ What you will need:

-  4-30, subgroups of 4-5
-  Group workshop
-  1 hr preparation
-  1.5 hrs execution
-  A5 white cards, markers, sticky notes, flip-chart

→ Related Tools:

 [Fostering Collaborative Creativity](#)

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“Engage students in a creative process, by facilitating them to think out-of-the-box together. This tool can offer you all the steps and resources that you and they will need to do so. The only thing that is left is to see the sparkles that will be created!”

—Dimitra Mousa





I. Overview

Brainstorming is an important skill for generating creative and innovative ideas to solve complex problems, especially in impact learning and challenge-based learning. Brainstorm sessions help teams to take a complex problem or question and break it down into a simple narrative, idea or solution.

Brainstorming involves two core phases: (1) ideation and (2) narrowing down. During the ideation phase, participants generate as many ideas as possible without judgment or analysis. This encourages creative and unconventional thinking. During the narrowing down phase, the team evaluates and selects the most promising ideas, refining and developing them into a workable solution.

By mastering brainstorming, students can improve their critical thinking, problem-solving, and teamwork abilities, leading to success in any field and a positive impact on society.

Learning outcome

- ✓ The student is able to apply creative thinking techniques to generate and develop original ideas and innovations





II. Learning Activity

Using brainstorming rules and Eureka cards to generate and develop innovative ideas through a collaborative, non-judgmental approach.



1. Define Activity 15 mins

Welcome all students and provide an overview of the session's goal, emphasizing the main question or problem that the group will be brainstorming.

Tip: by establishing clear guidelines and expectations for brainstorming, you can help ensure a productive and collaborative session.



2. Ideate 15 mins

Instruct students to spend one minute generating ideas and writing them on individual blank A5 cards, with one idea per card. After the minute is up, every student passes the cards to the person on their right, who will contribute their own idea and further develop the existing idea on the card. Keep passing the cards around until all students have contributed to each card. This process typically takes around 10 minutes and can be repeated as needed to generate a variety of ideas.

If students encounter a creative block, they can draw an Eureka card. Encourage them to take a minute to read and reflect before continuing with idea generation. If they still struggle, they can move on to the next Eureka card until they come up with a new idea. Even if students don't face any blocks during the brainstorming session, the Eureka cards can be used to foster creativity.

By fostering collaborative work and building upon one another's ideas, students can



generate a diverse range of potential solutions for the given problem.



3. Narrow Down 20 mins

To narrow it down, present the following rules to the students:

- Stay on topic and avoid tangents to ensure that the ideas generated are relevant to the problem at hand
- One conversation at a time

Introduce the traffic light method. Students review and prioritise the A5 cards by individually marking them with a colour dot based on the provided table:

Once everyone has marked their preferences, the group reviews the ideas that have most green dots and discusses which one to choose as the main idea to develop further or how to combine ideas from different cards.

After reviewing, the students pitch their chosen idea.



4. Reflection 30 mins

Using the rules for brainstorming as guidelines, each student will answer the reflective questions individually first, followed by a peer-group reflection on the brainstorming process.

Afterwards, students will share their reflections within the group and provide each other with feedback on the process.

Please note, as part of the assessment *as learning*, students reflect using the reflective questions.





5. Sharing 15 mins

The activity can be conducted in a circle involving all the teams, where each team pitches their final selection of ideas. Additionally, each team will reflect on their brainstorming process and provide examples of how they applied the rules for brainstorming.





III. Assessment

To assess creativity and creative thinking in brainstorming, students reflect on their own performance during the process and incorporate feedback from their teammates. They will evaluate their transition from the beginning to the end of the process and check if they followed the brainstorming rules presented by the teacher. This reflection, along with constructive peer feedback, will be incorporated into Step 4 of the activity.



Purpose

Assessment *as* learning aims to strengthen the learning process and the development of metacognitive skills. It empowers students to direct their own learning and to become independent, critical self-assessors.



Roles

Self-reflection



Characteristics

Self-regulated learning



Materials

Reflective questions



Assessment

Reflective questions

1. How well do you think you followed the brainstorming rules?
2. What strategies did you use to overcome any challenges or obstacles that arose during the brainstorming session?
3. Did the brainstorming session help you to think more creatively and outside the box?
4. What did you learn from the feedback given by your peers? How can you use this to improve your own ideas?
5. What improvements could you make in your approach to brainstorming in order to enhance your creative thinking abilities?





IV. Key Advice

Rules for brainstorming and examples of brainstorming questions (Step 1) can be downloaded below.

Eureka cards (Step 2) are designed to encourage creativity and help students when they feel stuck in the process. The cards can provide prompts or suggestions to help spark new ideas and break through mental blocks. By incorporating Eureka cards into the brainstorming process, students can feel supported and empowered to think creatively and develop innovative solutions to the problem at hand.





Key Advice

Rules for Brainstorming

Establishing clear guidelines and expectations for the brainstorming process can help ensure a productive and collaborative session. The most important brainstorming rules include:

1. Promote equal participation to ensure that everyone has an opportunity to share their unique perspectives.
2. Listen actively and respectfully to each other's ideas, showing openness to all viewpoints.
3. Encourage everyone to contribute their ideas, as every idea has the potential to inspire new and creative solutions.
4. Avoid judging or criticising any idea, as this can stifle creativity and discourage participation.
5. Expand on each other's ideas to generate new and innovative solutions that may not have been thought of individually.
6. Go for quantity and be visual. When generating ideas, strive for quantity. Using visual aids such as sketches, diagrams or mind maps helps express and develop ideas in a more engaging and memorable way.

Examples of brainstorming questions

- What are some ways to improve urban mobility in a specific city?
- How can we accelerate the adoption of renewable energy solutions?
- In what ways can we promote sustainable and equitable practices in coffee production?
- How can we enhance social cohesion at the university?





Eureka cards

The questions below will be used as cards during the brainstorming process. These cards will be placed in a pile and offered to each team.

The Eureka Cards were inspired by Brian Eno's "[Oblique Strategies](#)" cards, which were designed to support the creative processes of artists and other creatives. Since their initial publication in 1975, they have been used all over the world. The questions on the Eureka Cards are also inspired by the CBL game "CBL Nudge," an application created by the CBL organisation.

What is your passion?	Which area could you contribute to?
What do you find important/care about?	What is not working so far?
Do you have a goal?	How is society facing this far?
What was important to you as a kid?	Who needs help in the community?





What brings you energy?	Write a question for the given question.
What bothers you?	How does this question impact you?
What could work better?	Change three words in the question you were given.
What do you think of when you think of impact?	Rephrase the question you are given.
Draw one element that represents the question you were given.	Locate the action verb in your question.
Who is affected by this topic?	Ask an under-the-surface question; Why?





Who is affecting this topic?	Ask an under-the-surface question; What if?
Is someone already working on this?	Ask an under-the-surface question; How come?
What story would you like to tell?	What would not solve this question?





V. References

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