

CREATIVE THINKING TOOLKIT



SCAMPER

Use SCAMPER to generate more options, to get fresh approaches to challenges and for innovation.



Substitute

What materials or resources might you replace?



Combine

What other materials, parts, ingredients or technologies might be brought in?



Adapt

What might be borrowed from another product or industry to create a new product?



Magnify or minimize

What parts, components or aspects can you make really small, or big,? Significant/insignificant?



Put to another use

How might you apply the product, service or challenge in new ways?



Eliminate

What could be removed from the product or situation? How might you simplify the process?



Reverse or rearrange

What if you put things together in a new or different order?

Source: A. Osborn, *Applied Imagination: Principles And Procedures Of Creative Problem Solving* and R. Eberle, *Scamper: Games for Imagination Development*

BRAINSTORMING

This classic idea generating tool is best used following a set process and guidelines with a group. The goal is to generate lots of many diverse options with a group and capture all options quickly including the good, bad and wild ideas without judging them.

How to brainstorm

- 1 The minimum option quota is 30-50 per round of brainstorming. Do this fast, in roughly 5-10 minutes to encourage rapid-fire idea production.
- 2 Have the students say their options out loud. No judgments, elaborations, stories or discussions!
- 3 Have the facilitator write each option exactly as said so the group can see and build off of them.
- 4 Keep generating options until you've achieved the quota. Take a mental break, then do additional rounds as necessary.

Divergent Thinking Guidelines:

- ☒ Go for Quantity
- ☒ Defer Judgment
- ☒ Build on Ideas
- ☒ Go for Wild Ideas

Stick 'Em Up Process:

Capture options more quickly by delegating the idea-writing to everyone in the group! Brainstorm with Post-Its!

- Equip everyone with a Post-It pad and thin tip marker.
- One idea per Post It Note.
- Say the option out loud.
- Pass it up to the poster board.
- Continue to add ideas without overthinking.
- Don't stop until you've hit your minimum quota of 30-50 per round!

Post-Its allow for easier clustering when narrowing options later!

Source: A. Osborn, *Applied Imagination: Principles And Procedures Of Creative Problem Solving* Source: Miller, Vehar & Firestien, *Creativity Unbound: An Introduction to Creative Process*.

BRAINWRITING

Use BrainWriting to stretch your thinking further and come up with even more unique ideas. Feel free to build on ideas provided or come up with new solutions.

Your Question: _____

A	A
B	B
C	C

PERSPECTIVES

Stuck in a thinking rut? Use different perspectives to look at the situation from new viewpoints, and generate new, unique options.

- 1 List your overall goal or challenge:

- 2 List 8-10 different people (could be a specific person you know or a general description of a person: a mom, a business owner, a farmer. You may include celebrities or even your pet!

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- 3 Pick ONE perspective to start with. Consider your goal/challenge from the perspective of this first viewpoint. What new ideas come to mind when considering other people's views?

Possible perspectives:

<i>Your mom</i>	<i>Opera singer</i>
<i>Farmer</i>	<i>Journalist</i>
<i>Police officer</i>	<i>Chef</i>
<i>Teacher</i>	<i>Local government</i>
<i>Oprah</i>	<i>Your favourite singer</i>
<i>Your best friend</i>	<i>Bus driver</i>
<i>Grandmother</i>	<i>Writer</i>
<i>Mayor</i>	<i>Lawyer</i>

CRAZY 8'S

Generate new and unusual ideas! Read a prompt for each box. Spend ONE minute capturing an idea in a quick sketch. Repeat 8x.

SIX THINKING HATS

A technique which allows you to take different perspectives on an issue or idea and think about alternative ideas to move forward.

PROCESS



Blue Hat - Process

Thinking about thinking.
What thinking is needed?
Organizing the thinking.
Planning for action.

FACTS



White Hat - Facts

Information and data.
Neutral and objective.
What do I know?
What do I need to find out?
How will I get the information I need?

FEELINGS



Red Hat - Feelings

Intuition, hunches, gut instinct.
My feelings right now.
Feelings can change.
No reasons are given.

CREATIVITY



Green Hat - Creativity

Ideas, alternatives, possibilities
Provocations - "PO".
Solutions to black hat problems.

BENEFITS



Yellow Hat - Benefits

Positives, plus points.
Logical reasons are given.
Why an idea is useful.

CAUTIONS



Black Hat - Cautions

Difficulties, weaknesses, dangers.
Logical reasons are given.
Spotting the risks.

STORYBOARDING

Draw your desired outcome in box #6. Draw where you are now in relation to the wish/goal in box #1. Fill in boxes 2-5 illustrating the in-between steps necessary.

1.	2.
3.	4.
5.	6.

IDEABOX

A mix and match method for generating ideas. Start by creating column category headings that apply to your task. Fill each column with various options. Mix and match, choosing one option from each column. What ideas does that combination give you? Repeat with different combinations.

Setting	Character 1	Character 2	Point of View	Style
house	girl	girl	narrator	action
forest	boy	boy	2 nd person	mystery
city	Superhero	a cat	3 rd person	comedy
park	a baker	a mom	a dog's	suspense
school	a giant	a frog	mother nature	horror
apartment	neighbour	a teacher	a dog's	documentary
suburb	grandma	a bear	multiple	drama
farm	police	old man	graphic novel	cartoon
cottage	a dog	baby	text msgs	conflict
lake	a bird	horse		

The image consists of a 10x5 grid of squares. The squares are arranged in a repeating pattern of three shades of gray: dark gray, medium gray, and light gray. The pattern is as follows:

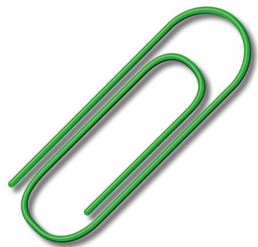
- Row 1: Dark gray, Medium gray, Dark gray, Medium gray, Dark gray
- Row 2: Medium gray, Light gray, Medium gray, Light gray, Medium gray
- Row 3: Dark gray, Medium gray, Dark gray, Medium gray, Dark gray
- Row 4: Medium gray, Light gray, Medium gray, Light gray, Medium gray
- Row 5: Dark gray, Medium gray, Dark gray, Medium gray, Dark gray
- Row 6: Medium gray, Light gray, Medium gray, Light gray, Medium gray
- Row 7: Dark gray, Medium gray, Dark gray, Medium gray, Dark gray
- Row 8: Medium gray, Light gray, Medium gray, Light gray, Medium gray
- Row 9: Dark gray, Medium gray, Dark gray, Medium gray, Dark gray
- Row 10: Medium gray, Light gray, Medium gray, Light gray, Medium gray

FORCED CONNECTIONS

A tool used to force novel thinking. Can be used on it's own or part of a brainstorming or brainwriting session. Method: select an object unrelated to the problem and ask: "When you look at this (object), what ideas do you get for solving the problem?" "What attributes do you see in this image? How might you connect that attribute to your challenge?"

Forced Connection Card Examples

Use the the following images as prompts and/or create your own visuals!



POINT

A tool for evaluative thinking and assessing options chosen or completed projects. Run through the process of praising first, stay affirmative about the ideas before moving into a productive way of addressing issues and promoting innovative solutions.

P

Pluses

- List all of the positive points of this idea or product.
- Use divergent thinking to expand your list beyond just a few bullet points.

O

Opportunities

- What are all of the good things that might result (or have resulted) from this idea?
- Begin your list with "It might..."

I

Issues

- List any issues that may results or have resulted from this idea or product.
- Phrase these issues as questions: "How to..." "How might..." or "In what ways might..." List any key concerns.




Nt

New thinking

- Use divergent thinking to generate solutions to overcome the most critical issues.

VISUAL CONNECTIONS

A tool for inventing a new outcome or generating novel solutions to a challenge.
Take two completely unrelated objects and look for ways to combine.

	+		=	
	+		=	
	+		=	

EXCURSIONS

Mental or actual voyages that take people outside the problem to look for inspiration elsewhere. One method is a facilitator taking participants through a journey to a specific place or one of their own imagining. Another approach is to physically experience a new space (if possible) to inspire new thinking, options or ideas.

In a classroom setting, set the tone by dimming the lights, play soft music or project a video of your selected scene: a beach scene, rainforest or magical forest etc.

