Ulisse

Soft Skills for Employability

CREATIVITY

Co-funded by the Erasmus+ Programme of the European Union

How would you make people prefer walking up stairs?

http://www.youtube.com/watch?v=Q-DbJ4M81eQ

Contents

- What is creativity?
- Aspects of creativity
- Characteristics of a creative person?
- Convergent and divergent thought
- Barriers to creativity
- Creativity boosters
- Great ideas
- The creative process
- Creativity techniques

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What is CREATIVITY?

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Can you identify three CREATIVE persons?

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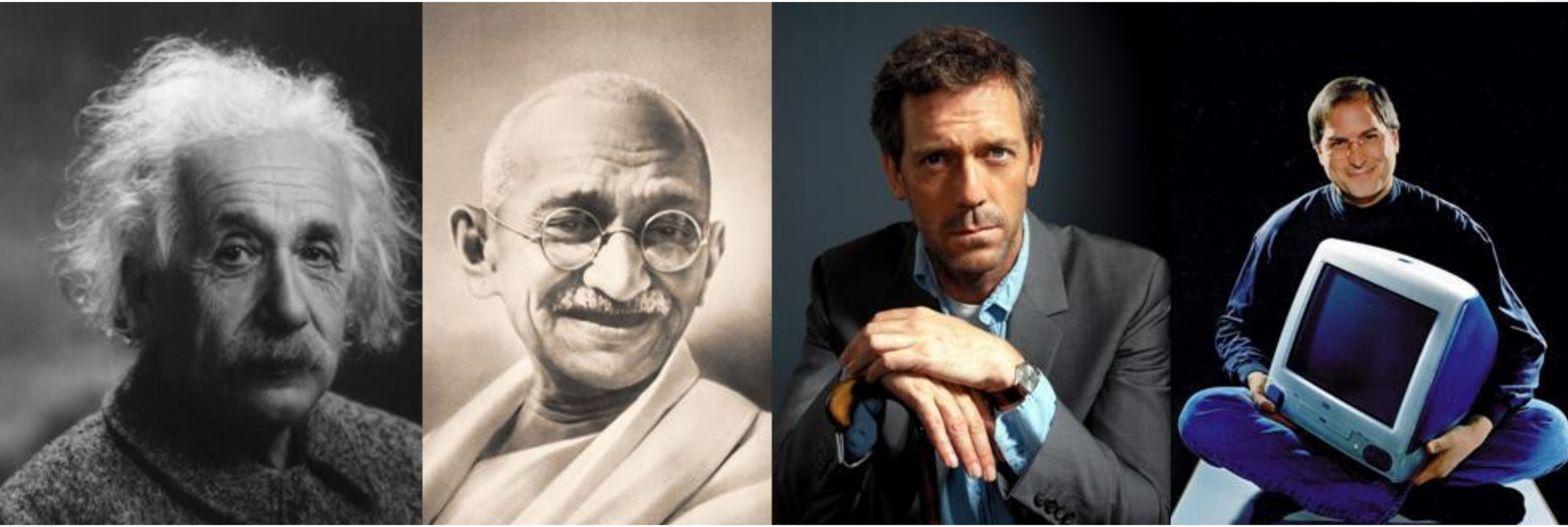
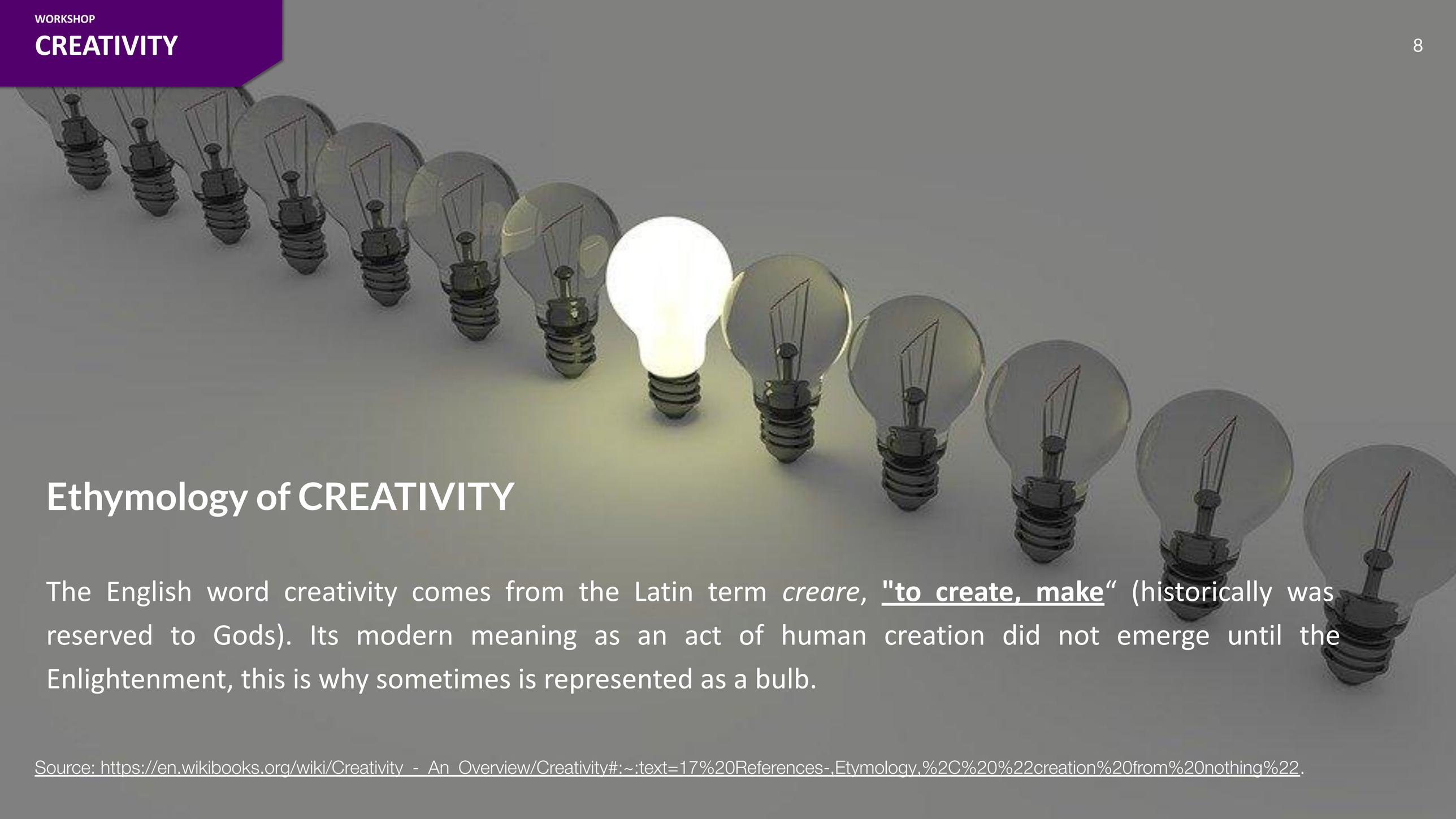
Think of original people…

designers… artists… poets… **painters**… musicians…

… and what about?



scientists… entrepreneurs… engineers… doctors…



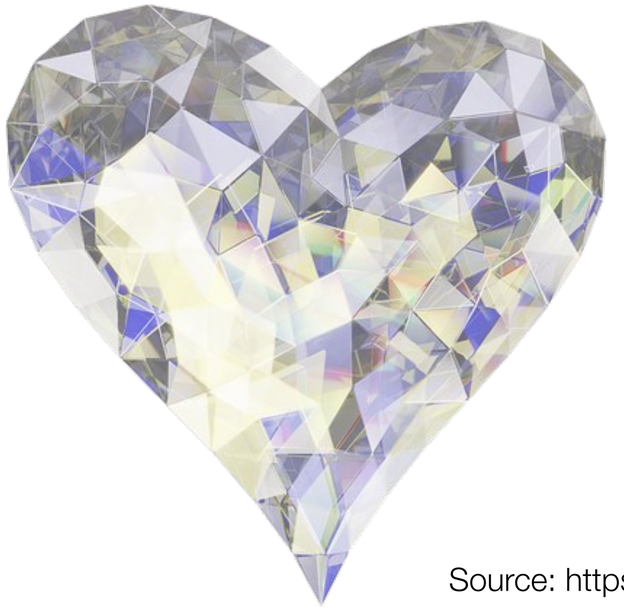
Ethymology of CREATIVITY

The English word creativity comes from the Latin term *creare*, **"to create, make**“ (historically was reserved to Gods). Its modern meaning as an act of human creation did not emerge until the Enlightenment, this is why sometimes is represented as a bulb.

Source: https://en.wikibooks.org/wiki/Creativity_-_An_Overview/Creativity#:~:text=17%20References-,Etymology,%2C%20%22creation%20from%20nothing%22.

What do we call CREATIVITY?

Creativity is a phenomenon whereby something **NEW (ORIGINAL)** and **SOMEHOW VALUABLE (WORTHWHILE)** is formed. The created item may be intangible (such as an idea, a scientific theory, a musical composition, or a joke) or a physical object (such as an invention, a printed literary work, or a painting).



Source: https://en.wikipedia.org/wiki/Creativity

NOVELTY is a necessary condition but not enough.

There is another very important condition:

IT MUST BE **VALUABLE**, it must be useful, that it serves to solve the problem.

Is it important to be CREATIVE in a professional career?

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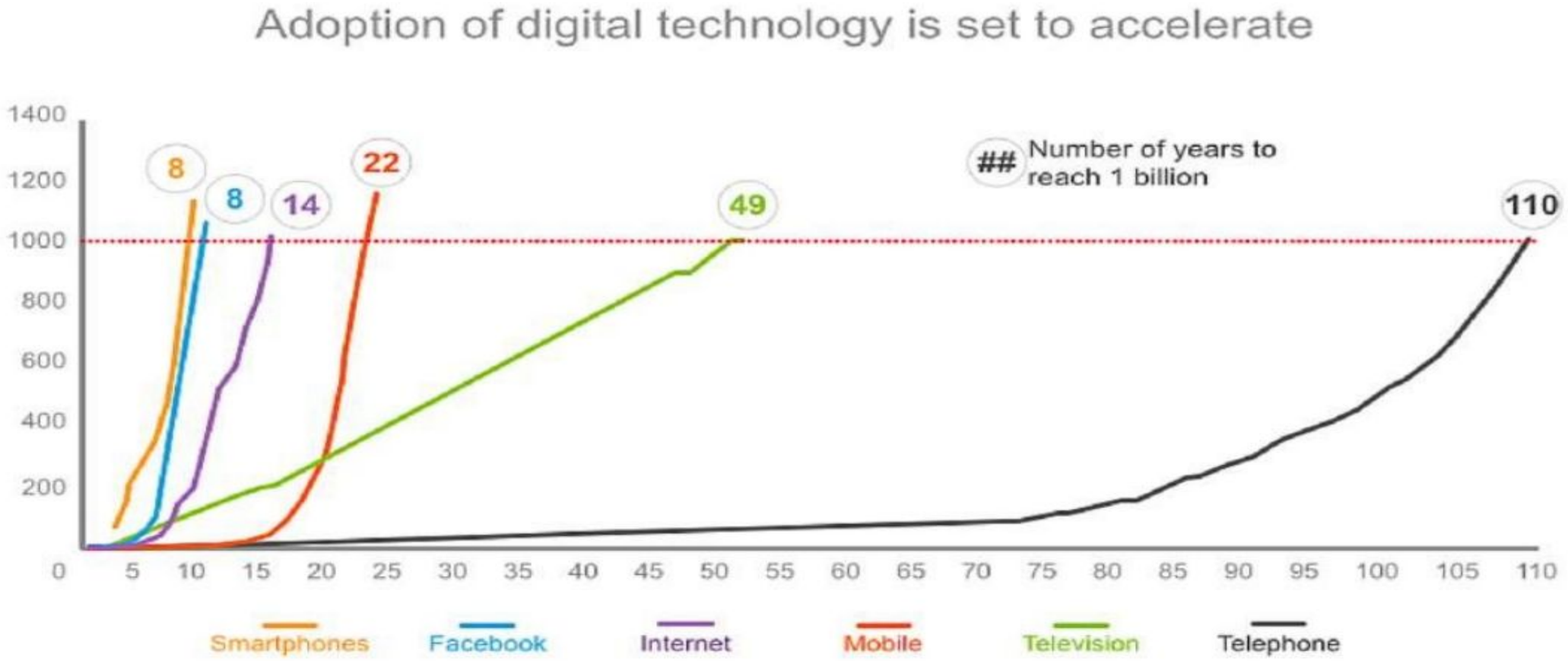
¿WHY IT'S SO IMPORTANT?



Source: BCG, Google: Insurance @ Digital-20x by 2020

CONVERGENT and DIVERGENT thought

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Divergent or Lateral Thinking

Edward de Bono

Divergent or lateral thinking is looking for alternatives or different creative possibilities for solving a problem.

Source: DE BONO, E. (1967) The Use of Lateral Thinking

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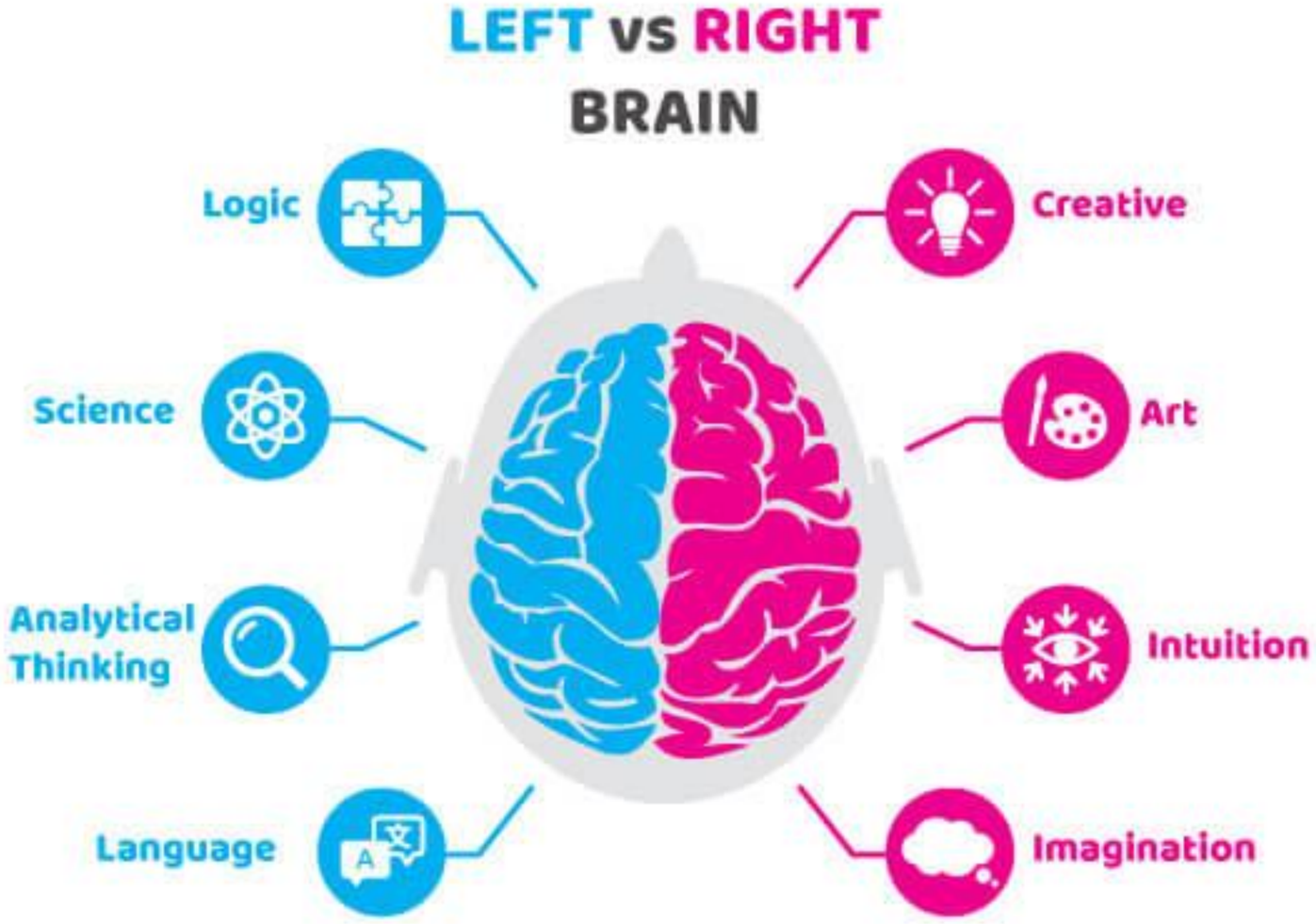


Source: https://www.mentalup.co/blog/left-brain-right-brain-dominant

Amy Cuddy, your body language might shape who you are https://www.ted.com/talks/amy_cuddy_your_body_language_may_shape_who_you_are?language=it

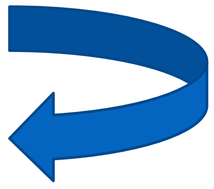
Jill Bolte Taylor, My stroke of insight https://www.ted.com/talks/jill_bolte_taylor_my_stroke_of_insight

¿How is the dancer Spinning?

¿Counterclock-wise?

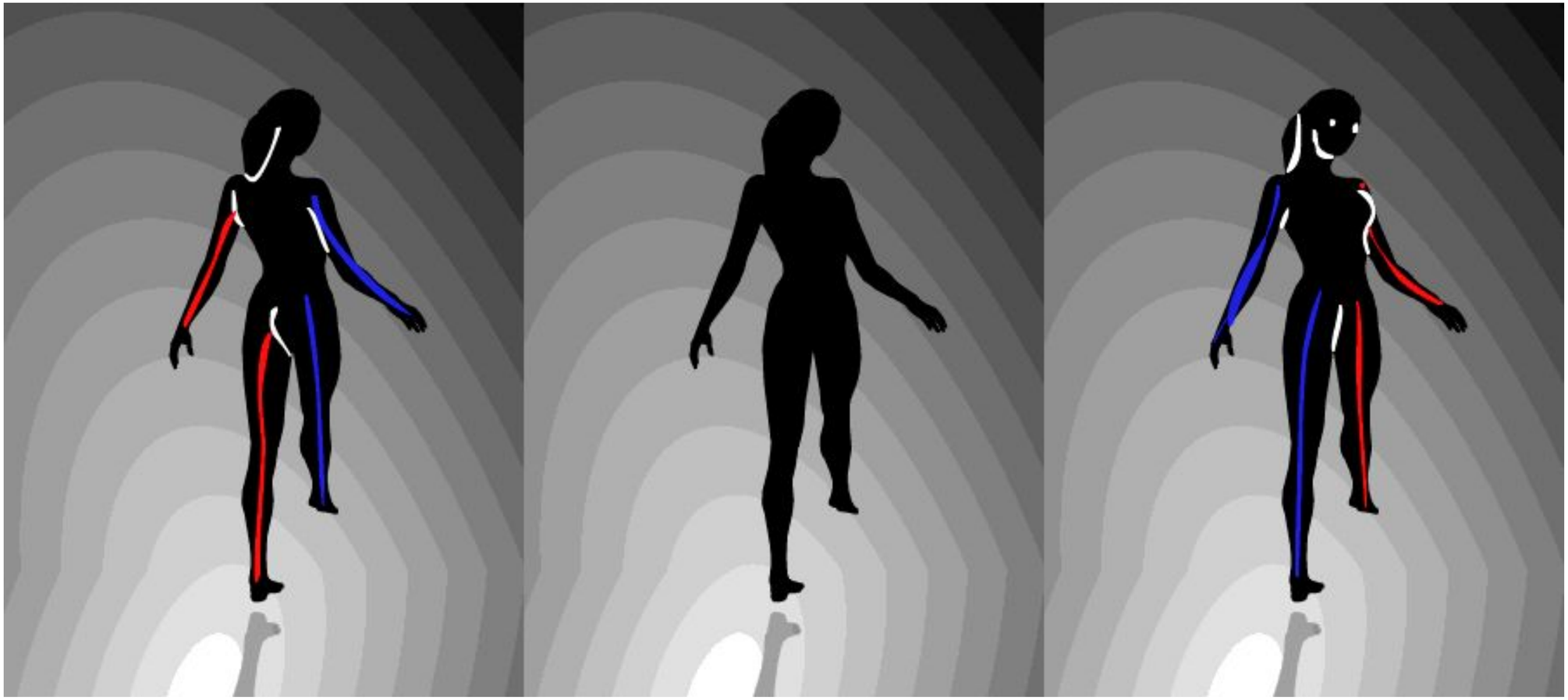
Left side

¿Clockwise?



Right side

CREATIVITY



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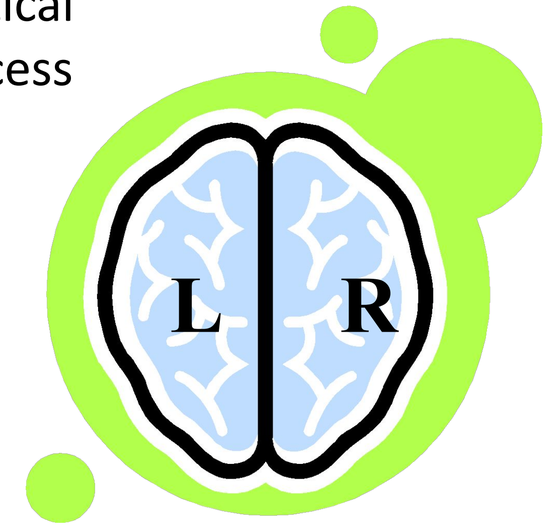
CONVERGENT THINKING VS. DIVERGENT THINKING

- It's governed by patterns
  Looks for the truth, the right thing
  Excludes new routes to follow routines
  Uses the ABCD sequence
  Moves with defined purpose, analytical
  Responds to a finite process
  It conforms to the known way



- Breaks existing structures
  He gets restless about the new
  Opens new avenues, experiments
  Uses ACBD, BDCA...
  You can move for no purpose
  Responds to a likely process
  Create new ways

Source: Kim, KH. and Pierce, RA . Convergent vs Divergent thinking, https://doi.org/10.1007/978-1-4614-3858-8_22

We have VERY GOOD NEWS!!!!

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CREATIVITY CAN BE **LEARNED AND DEVELOPED**

YES, WE CAN ALL BE CREATIVE !!!

There are no people WITHOUT CREATIVITY but people **BLOCKED**

GAMES TO ACTIVATE YOUR RIGHT HEMISPHERE…

- Conversational Hand
- Breathing Exercise
- Matching Game
- The Alphabet Game

THE ALPHABET GAME CHART

a	**b**	**c**	**d**	**e**
l	r	t	t	l
f	**g**	**h**	**i**	**j**
r	l	t	r	t
k	**l**	**m**	**n**	**o**
l	r	t	l	r
p	**q**	**r**	**s**	**t**
l	t	l	l	t
u	**v**	**w**	**x**	**y**
l	l	t	r	t

l = left

r = right

t = together

Source: Grinder,J and Bostic St Claire, C, (2001), https://www.nlpacademy.co.uk/articles/view/new_code_nlp_games_high_performance_states_and_the_alphabet_game/
MentalUp https://www.mentalup.co/blog/right-brain-left-brain-development-methods

THE ALPHABET GAME CHART

a	b	c	d	e
l	r	t	t	l
f	**g**	**h**	**i**	**j**
r	l	t	r	t
k	**l**	**m**	**n**	**o**
l	r	t	l	r
p	**q**	**r**	**s**	**t**
l	t	l	l	t
u	**v**	**w**	**x**	**y**
l	l	t	r	t

l = left

r = right

t = together

Source: Grinder,J and Bostic St Claire, C, (2001), https://www.nlpacademy.co.uk/articles/view/new_code_nlp_games_high_performance_states_and_the_alphabet_game/

BARRIERS to creativity

Source: PRESSFIELD, S. (2002). The War of Art.

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Conformism

#Blocks

Doing things AS THEY HAVE ALWAYS BEEN DONE OR HOW EVERYONE DOES IT

It's the WORST ENEMY of THE CREATIVITY

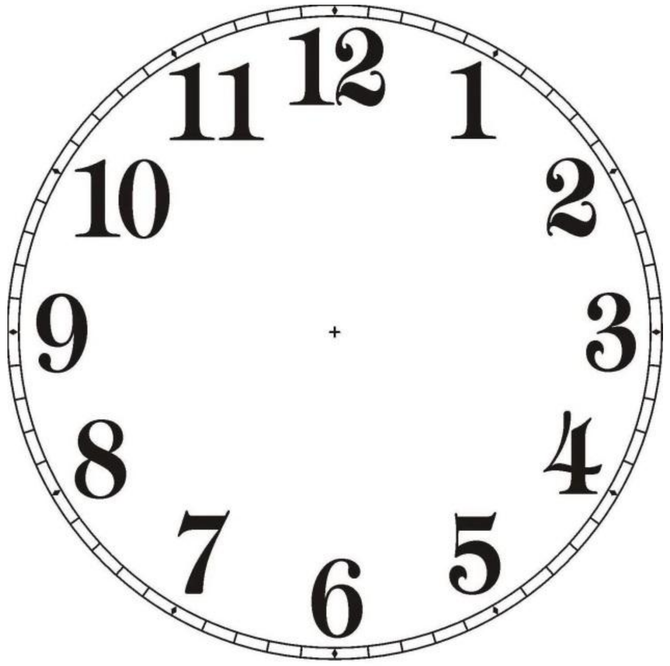
#Blocks

Rutinization

We are SLAVES OF HABITS

Take DIFFERENT WAYS

Do things DIFFERENTLY



#Blocks

Fear of Failure

~~Failure~~ → Results

Error → Learning

#Blocks

Fear of Ridicule

Experiment

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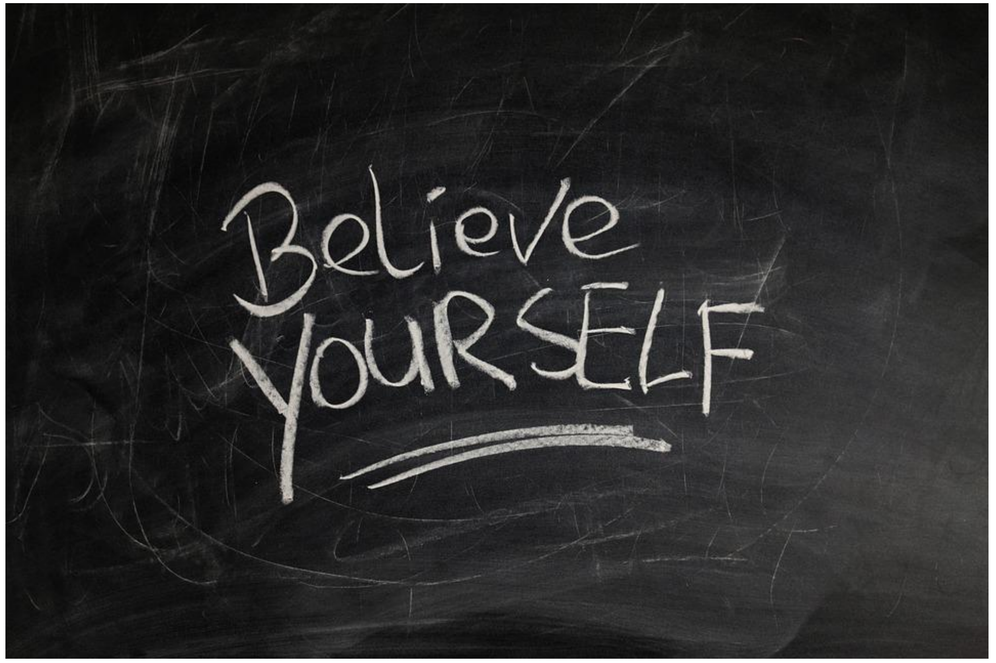
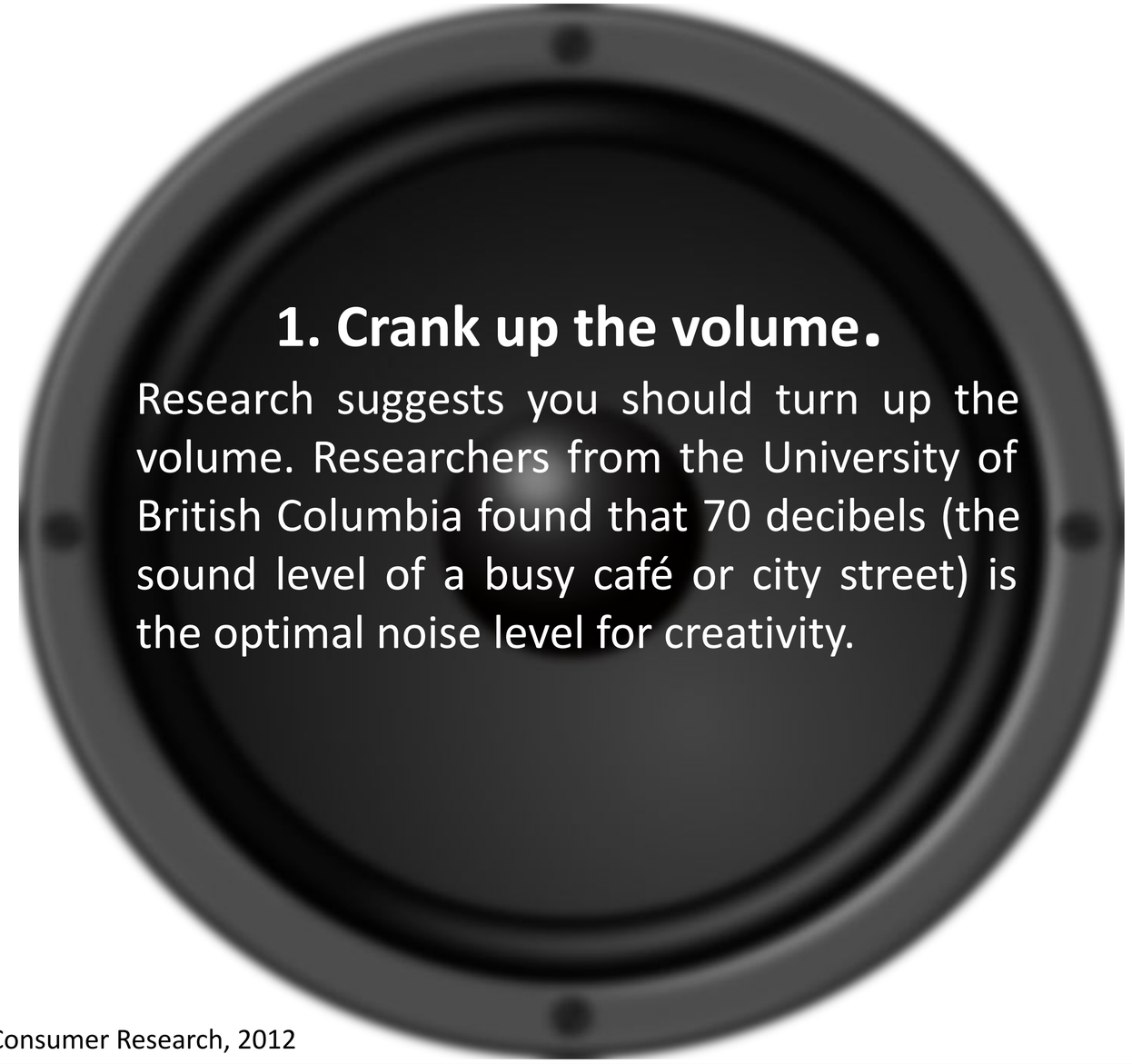
#Blocks

Lack of confidence



Have you identified (in you or others) any of the BARRIERS?

Creativity BOOSTERS



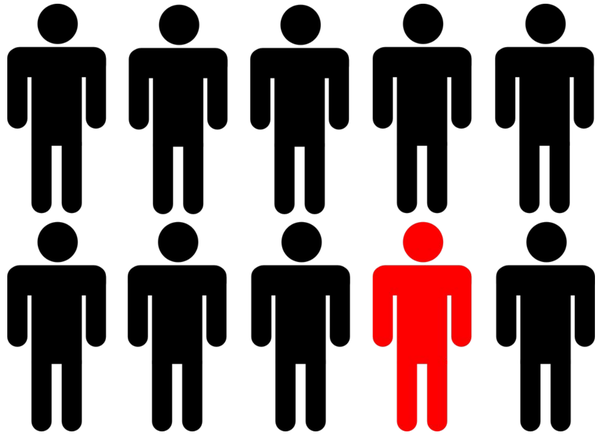
1. Crank up the volume.

Research suggests you should turn up the volume. Researchers from the University of British Columbia found that 70 decibels (the sound level of a busy café or city street) is the optimal noise level for creativity.

Source: R Mehta, R Zhu, A Cheema - Journal of Consumer Research, 2012

2. Look for the odd one out.

Enhancing our ability to create new and original solutions to problems can be as simple as staring at an image for a couple of minutes—as long as that image represents the concept of “being different.” One study compared the ideas generated by people looking at a poster depicting an “odd one out” image versus people seeing an image representing conformity. The “odd one out” viewers came up with significantly more ideas. In addition, their ideas were judged as being 25 percent more creative.



Source: http://onnero.com/index.php/contributors-article/52-/673-six-scientifically-proven-creativity-boosters-that-you-ve-probably-never-come-across

3. Clench your left hand.

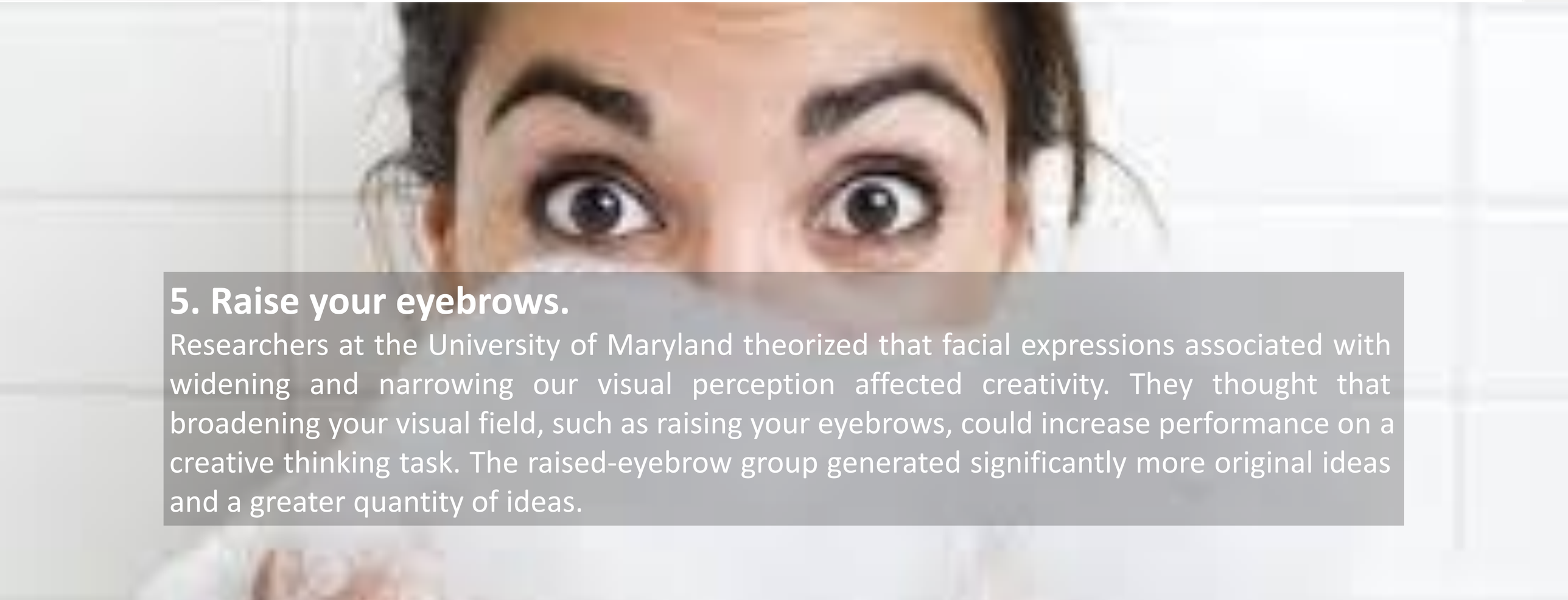
Psychology professor Nicola Baumann set up an experiment where one group of people had to squeeze a ball with their left hand while the other group had to squeeze a ball with their right. It was found that this simple act of squeezing one's left hand activated a brain circuit associated with thinking holistically and intuitively, and thus more creatively. So the next time you have a creative problem to solve, squeeze your left hand into a fist for optimum creative results.

Source: N **Baumann**, J Kuhl, M Kazén - Motivation and emotion, Left-hemispheric activation and self-infiltration: Testing a neuropsychological model of internalization, 2005

4. Get sweaty.

Participating in 30 minutes of aerobic exercise has been found to increase our ability to think creatively. And our increased creative ability can last for up to two hours post exercise.

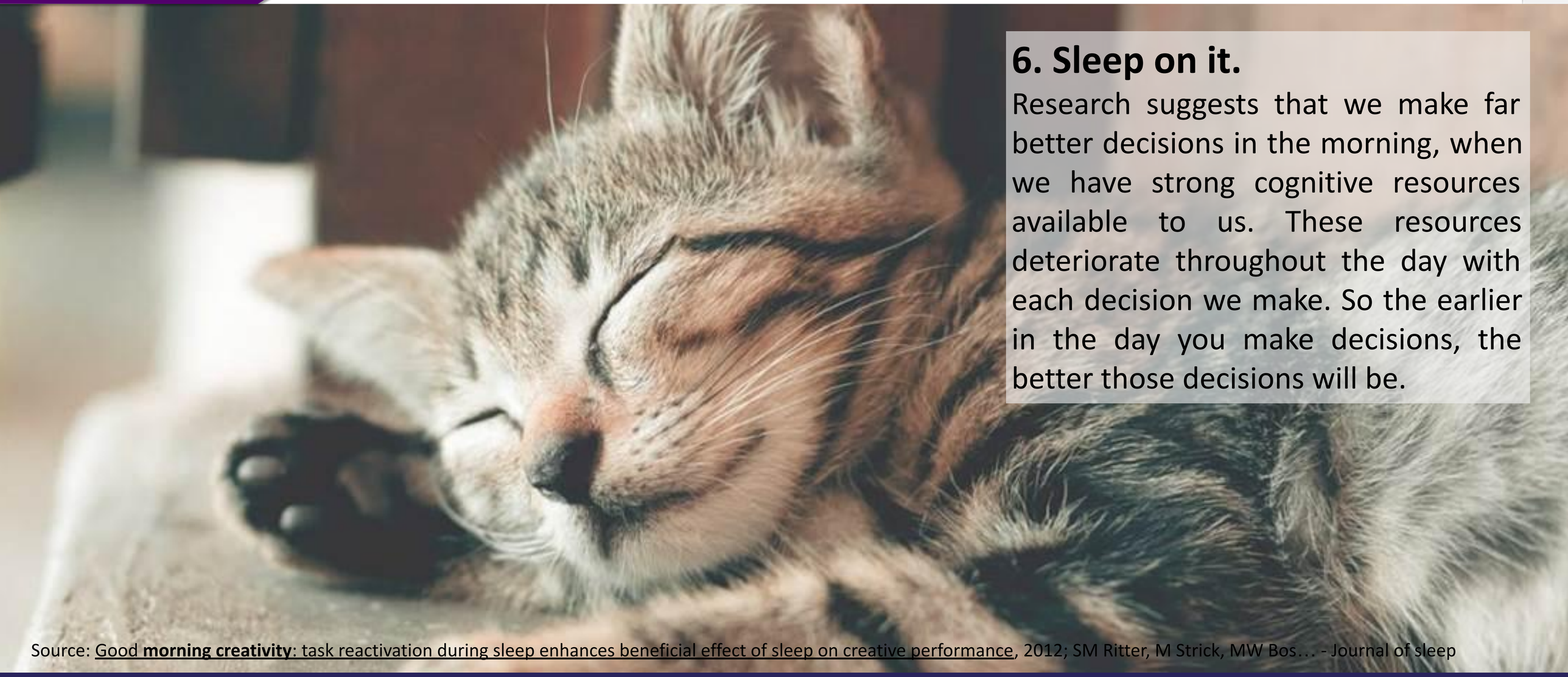
Source: https://www.success.com/top-of-mind-5-ways-to-get-ideas-flowing/



5. Raise your eyebrows.

Researchers at the University of Maryland theorized that facial expressions associated with widening and narrowing our visual perception affected creativity. They thought that broadening your visual field, such as raising your eyebrows, could increase performance on a creative thinking task. The raised-eyebrow group generated significantly more original ideas and a greater quantity of ideas.

Source: N Nakazato, S Yoshida, S Sakurai, T Narumi, 2014, Smart Face: enhancing creativity during video conferences using real-time facial deformation



6. Sleep on it.

Research suggests that we make far better decisions in the morning, when we have strong cognitive resources available to us. These resources deteriorate throughout the day with each decision we make. So the earlier in the day you make decisions, the better those decisions will be.

Source: Good **morning creativity**: task reactivation during sleep enhances beneficial effect of sleep on creative performance, 2012; SM Ritter, M Strick, MW Bos… - Journal of sleep

Have you identified (in you or others) any of the BOOSTERS?

LET'S MOVE!!!!
Walk, open arms and legs, look up, breath, smile

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The creative PROCESS

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5 Stages of the Creative Process

Preparation

- research
- Consume
- immerse
- gather

Incubation

- explore
- experiment
- synthesize

Illumination

Aha!

Evaluation

- Reflect
- Criticize
- Assess

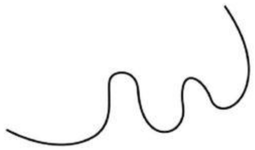
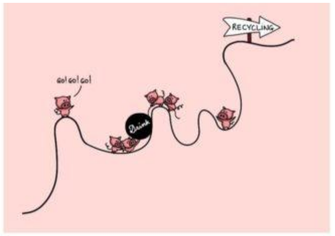
Implementation

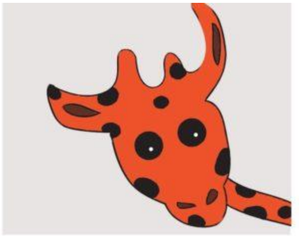
- work
- work
- work

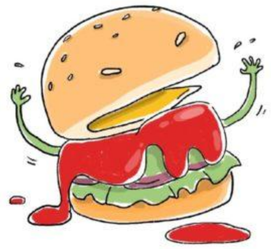
Source: https://ideapod.com/the-creative-process/

GAMES FOR WARMING UP CREATIVITY…

- 100 uses for…
- Name your team
- Complete the challenge
- Name an object of no use





Source: https://www.thedesigngym.com/five-games-creativity/ https://sapioresearch.com/blog/2017/4/21/games-for-creative-playing https://habyts.com/fun-exercises-to-quickly-improve-creative-thinking/

Creativity TECHNIQUES

Source:
http://creatingminds.org/tools/tools_all.htm

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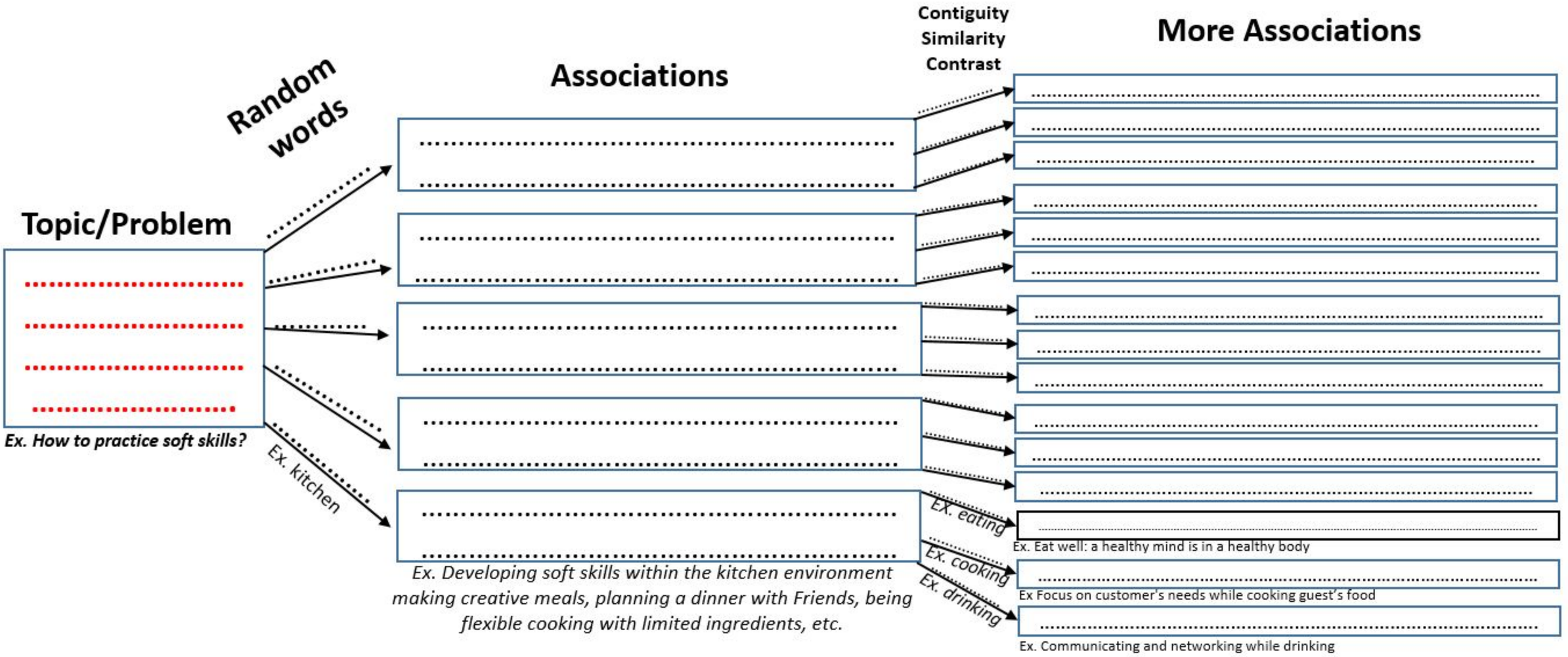
Random words associations

1. Present the problem
2. Pick up 5 or 6 random words from the dictionary
   Think of the connections between the words with the problem
3. Increase the associations of the words using:
   1. Contiguity (ex. Tree – Forest, foot – shoe)
   2. Similarity (ex. Cat – tiger, eye – camera)
   3. Contrast (ex. Sun – moon, light – shadow)
4. Make more connections



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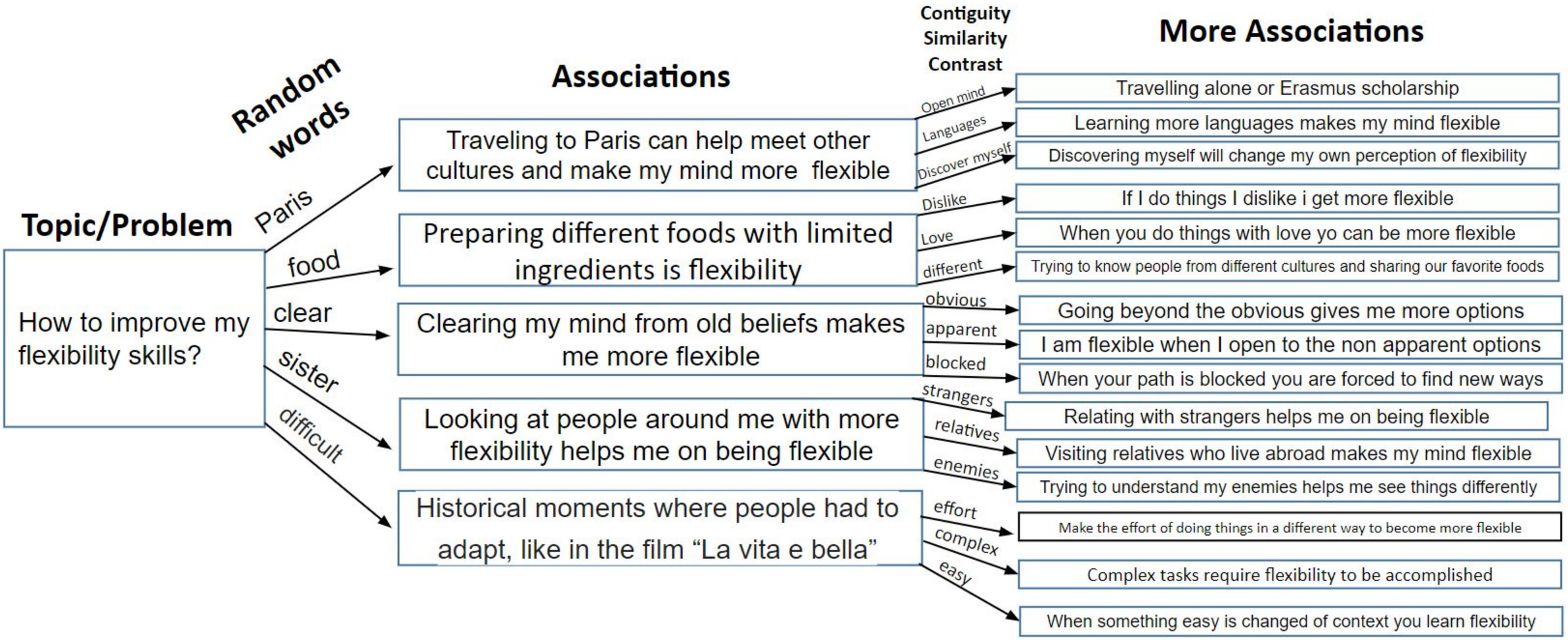
Template for Random Word Association



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Let’s do it!!!!

1. You will be in a room with your team: RED, BLUE, YELLOW, GREEN.
2. You have to identify a leader: ‘the youngest person of the group’
3. You have 20 minutes to resolve the exercise (all of you have to contribute with your ideas and discuss in your room/template).
4. The team should write in its mural

   Step 1: Present the problem

   Step 2: Pick up 1 random words per member from https://randomwordgenerator.com/

   Step 3: Think of the connections between the words with the problem. You can look up the meaning of the words in a dictionary https://www.dictionary.com/

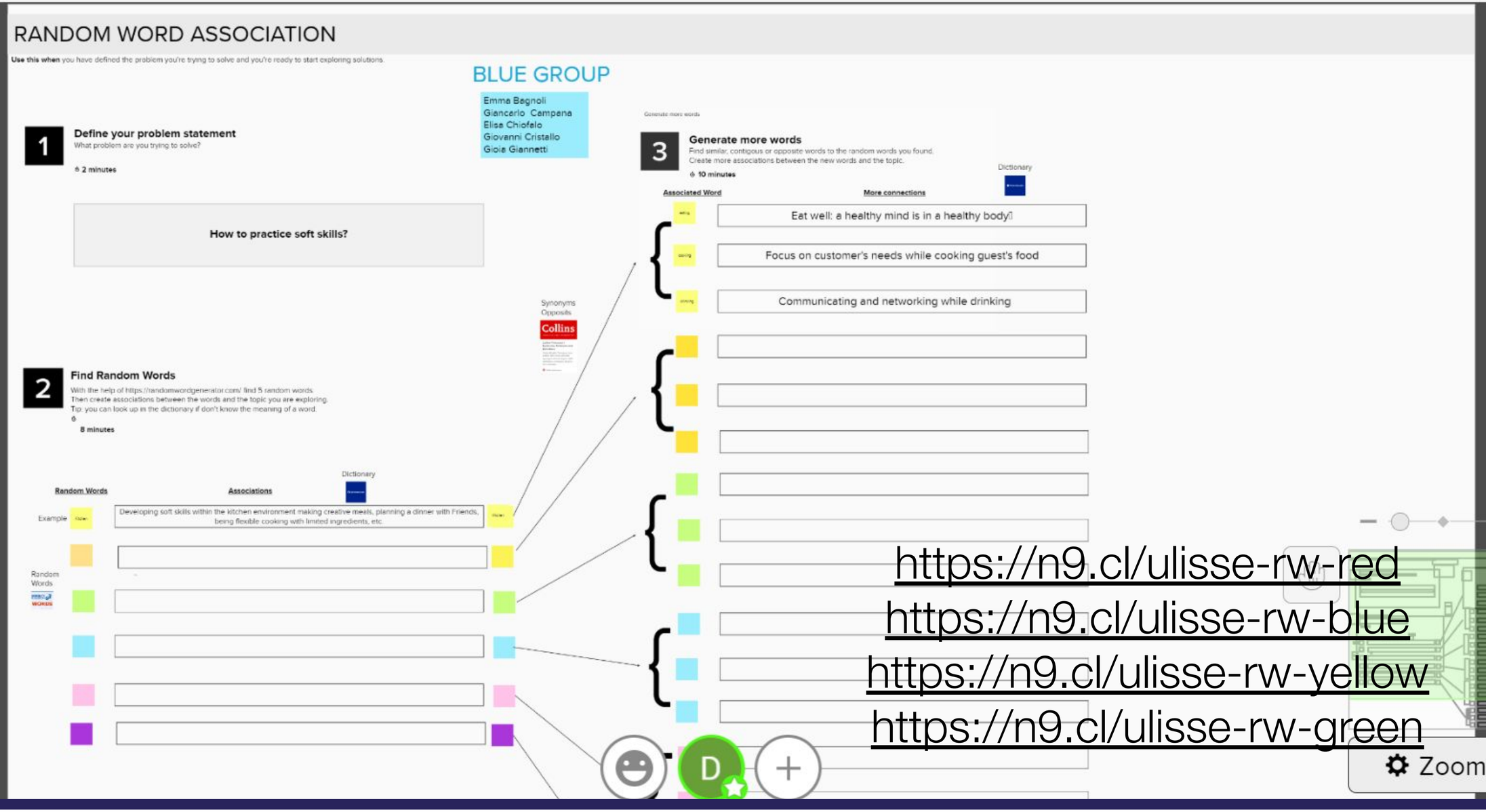
   Step 4: Increase the associations of the words using:

   - Contiguity (ex. Tree – Forest, foot – shoe)
   - Similarity (ex. Cat – tiger, eye – camera)
   - Contrast (ex. Sun – moon, light – shadow)

   Step 5: Make more connections

5. Go to the main room and the leader will share the experience:
   - What did you learn in this experience?
   - What would you improve next time?
   - In which contexts/problem can you use this technique?

https://n9.cl/ulisse-rw-red
https://n9.cl/ulisse-rw-blue
https://n9.cl/ulisse-rw-yellow
https://n9.cl/ulisse-rw-green


RANDOM WORD ASSOCIATION
Use this when you have defined the problem you're trying to solve and you're ready to start exploring solutions.
BLUE GROUP
Emma Bagnoli
Giancarlo Campana
Elisa Chiofalo
Giovanni Cristallo
Gioia Giannetti
1
Define your problem statement
What problem are you trying to solve?
2 minutes
How to practice soft skills?
2
Find Random Words
With the help of https://randomwordgenerator.com/ find 5 random words.
Then create associations between the words and the topic you are exploring.
Tip: you can look up in the dictionary if don't know the meaning of a word.
8 minutes
Random Words
Associations
Dictionary
Example
Developing soft skills within the kitchen environment making creative meals, planning a dinner with Friends, being flexible cooking with limited ingredients, etc.
Random Words
Synonyms
Opposite
Collins
3
Generate more words
Find similar, contigous or opposite words to the random words you found.
Create more associations between the new words and the topic.
10 minutes
Dictionary
Associated Word
More connections
Eat well: a healthy mind is in a healthy body
Focus on customer's needs while cooking guest's food
Communicating and networking while drinking
https://n9.cl/ulisse-rw-red
https://n9.cl/ulisse-rw-blue
https://n9.cl/ulisse-rw-yellow
https://n9.cl/ulisse-rw-green
Zoom settin

- What did you learn in this experience?
- What would you improve next time?
- In which contexts/problem can you use this technique?

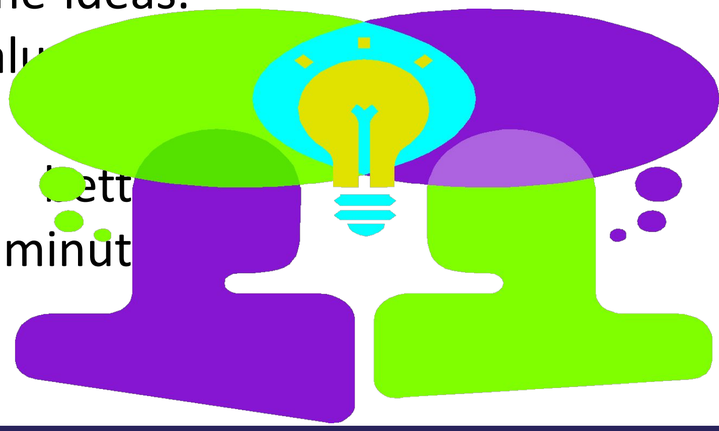
Brainstorming

How to generate ideas in a group:

- Each person thinks differently
  We generate more creative ideas by working as a group
  Less fear when expressing ideas when you are part of a group where quantity is more important than quality of ideas

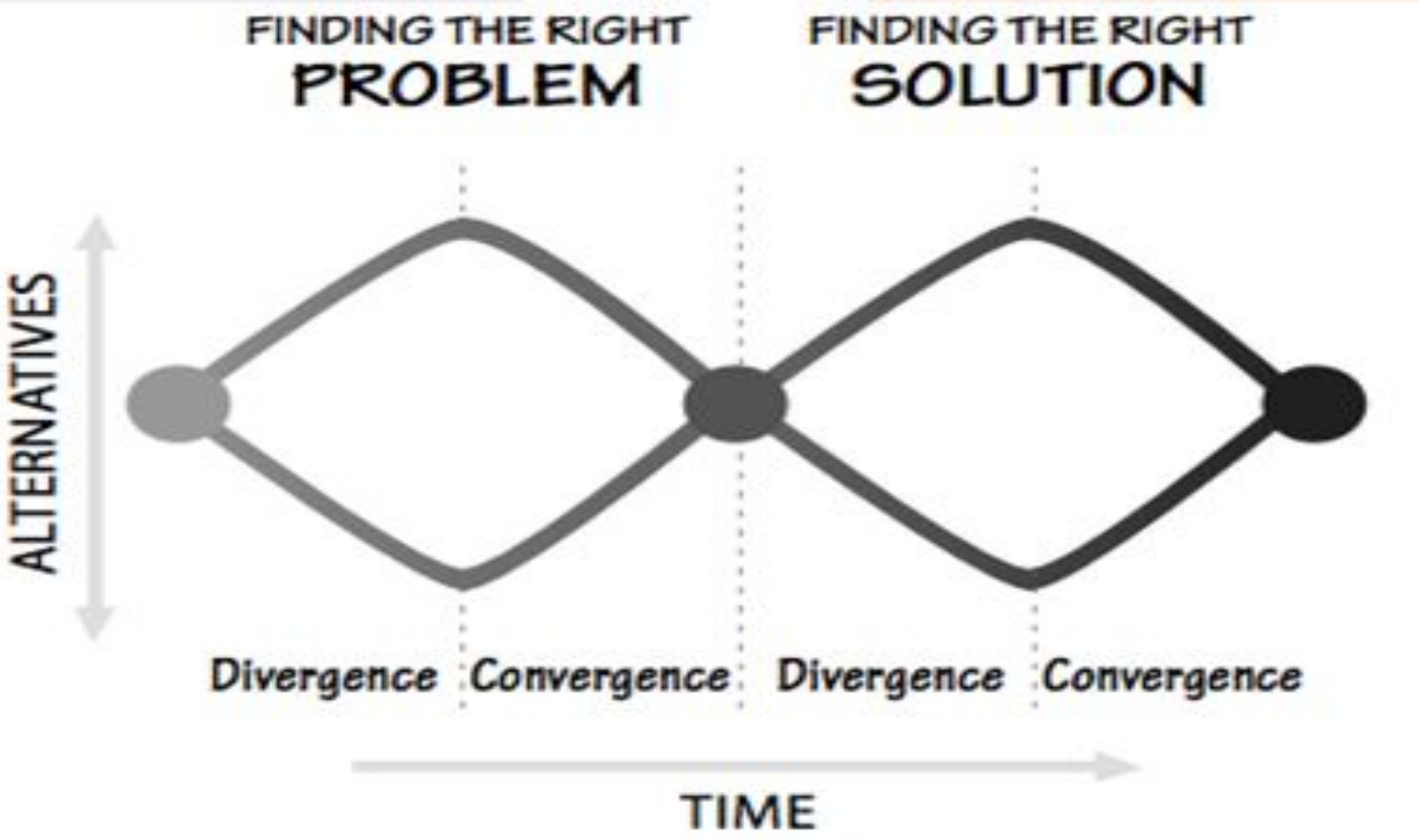
Brainstorming - rules

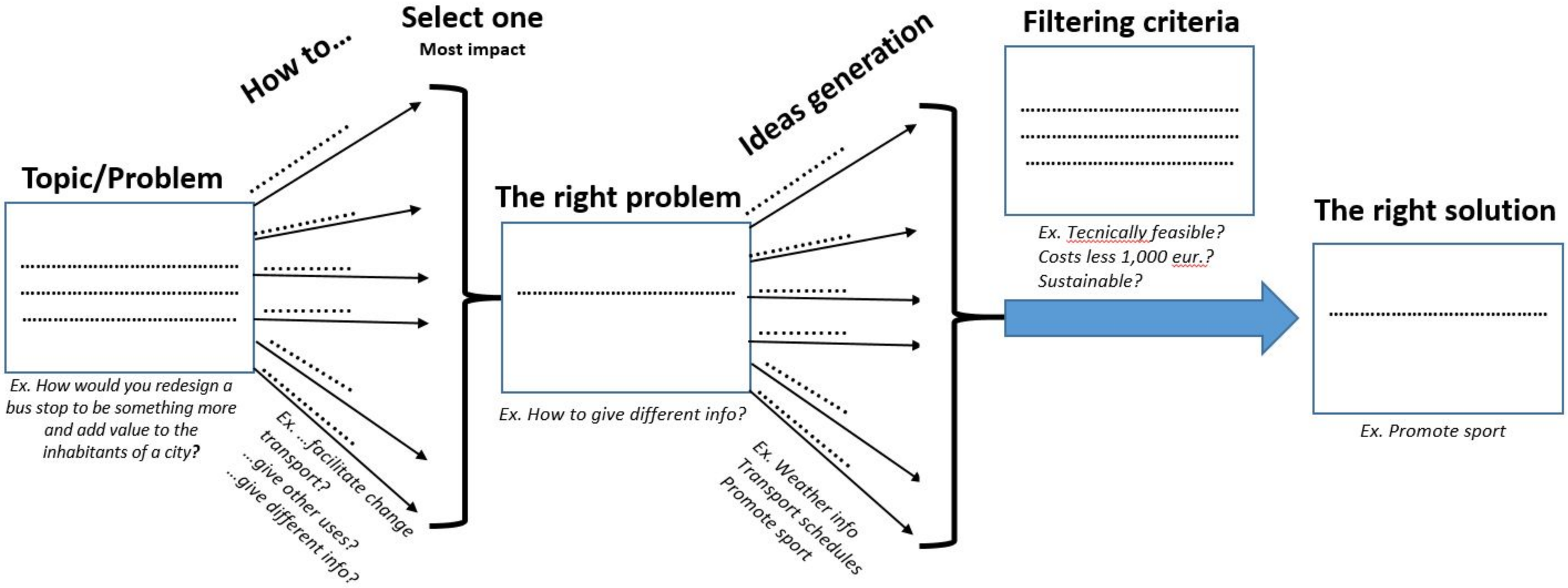
1. Clearly define the problem
   Gather a group of diverse people. The goal is to generate as many ideas as possible with the participation of all.
   Someone (or everyone in case of shared board) is going to write down the ideas.
   Accept all ideas without making criticism or evalu
   Listen and improve
   The more crazy they are, the bett
   Dedicate a maximum of 5 to 10 minut
   Have fun but keep an eye on it.



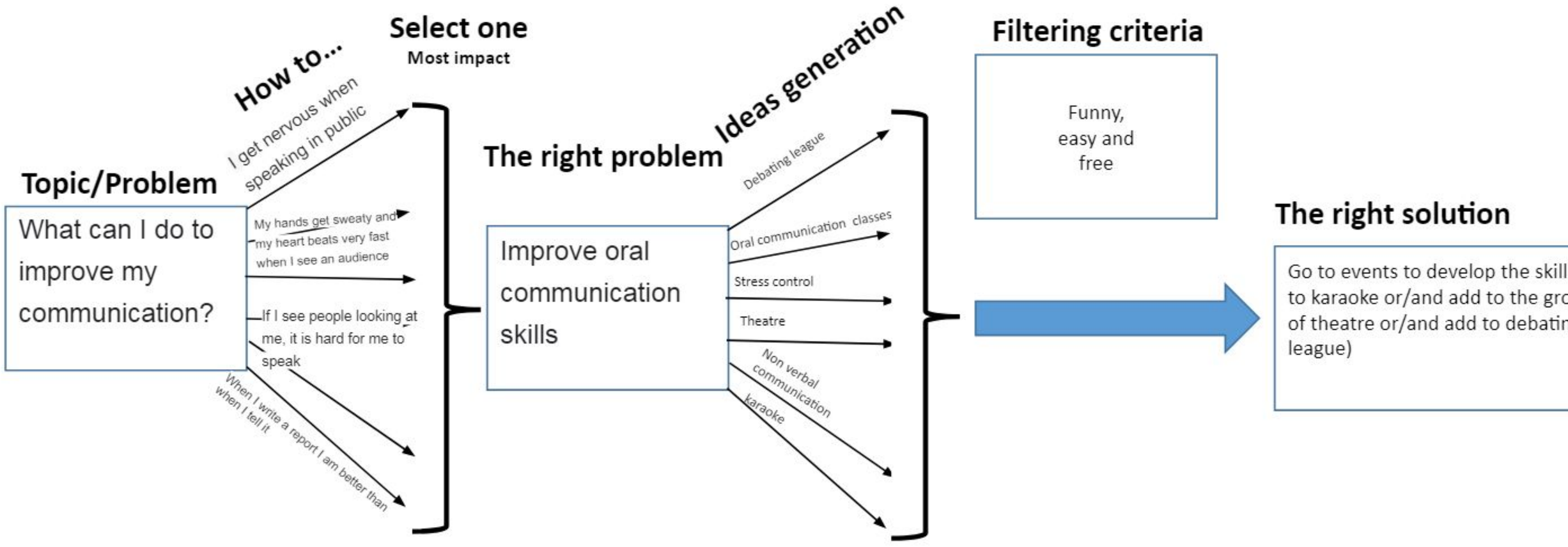
Brainstorming - steps

1. Present the problem
2. Re-frame the problem (How to…) to better understand and define the problem
3. Choose the right How to…
4. Brainstorm of ideas
5. Filter the ideas: do they fit criteria of selection?
6. Improvement/implementation of ideas
7. Selection of implementation


FINDING THE RIGHT
PROBLEM
FINDING THE RIGHT
SOLUTION
ALTERNATIVES
Divergence
Convergence
Divergence
Convergence
TIME


Topic/Problem
.....
.....
.....
Ex. How would you redesign a bus stop to be something more and add value to the inhabitants of a city?
How to...
.....
.....
.....
.....
.....
Ex. ...facilitate change transport?
...give other uses?
...give different info?
Select one
Most impact
The right problem
.....
Ex. How to give different info?
Ideas generation
.....
.....
.....
.....
.....
Ex. Weather info
Transport schedules
Promote sport
Filtering criteria
.....
.....
.....
Ex. Tecnically feasible?
Costs less 1,000 eur.?
Sustainable?
The right solution
.....
Ex. Promote sport

Template for Brainstorming



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Let’s do it!!!!

1. You will be in a room with your team: RED, BLUE, YELLOW, GREEN.
2. You have to identify a leader: ‘the youngest person of the group’
3. You have 27 minutes to resolve the exercise (all of you have to contribute with your ideas and discuss in your room/template).
4. The team should write in its mural

Step 1: Define the problem: brainstorm different points of view or aspects to the problem and vote the one that focus your problem.

Step 2: BrainStorm: write down any ideas that come to your mind to solve your problem. Remember: no judgement, go for volume, build on ideas of other, be wild, be visual, stay on topic

Step 3: Create a selection criteria to filter/evaluate your ideas

Step 4: Prioritize your ideas and select one with the highest importance and fesibility, if there is doubt vote among the best.

Go to the main room and the leader will share the experience:

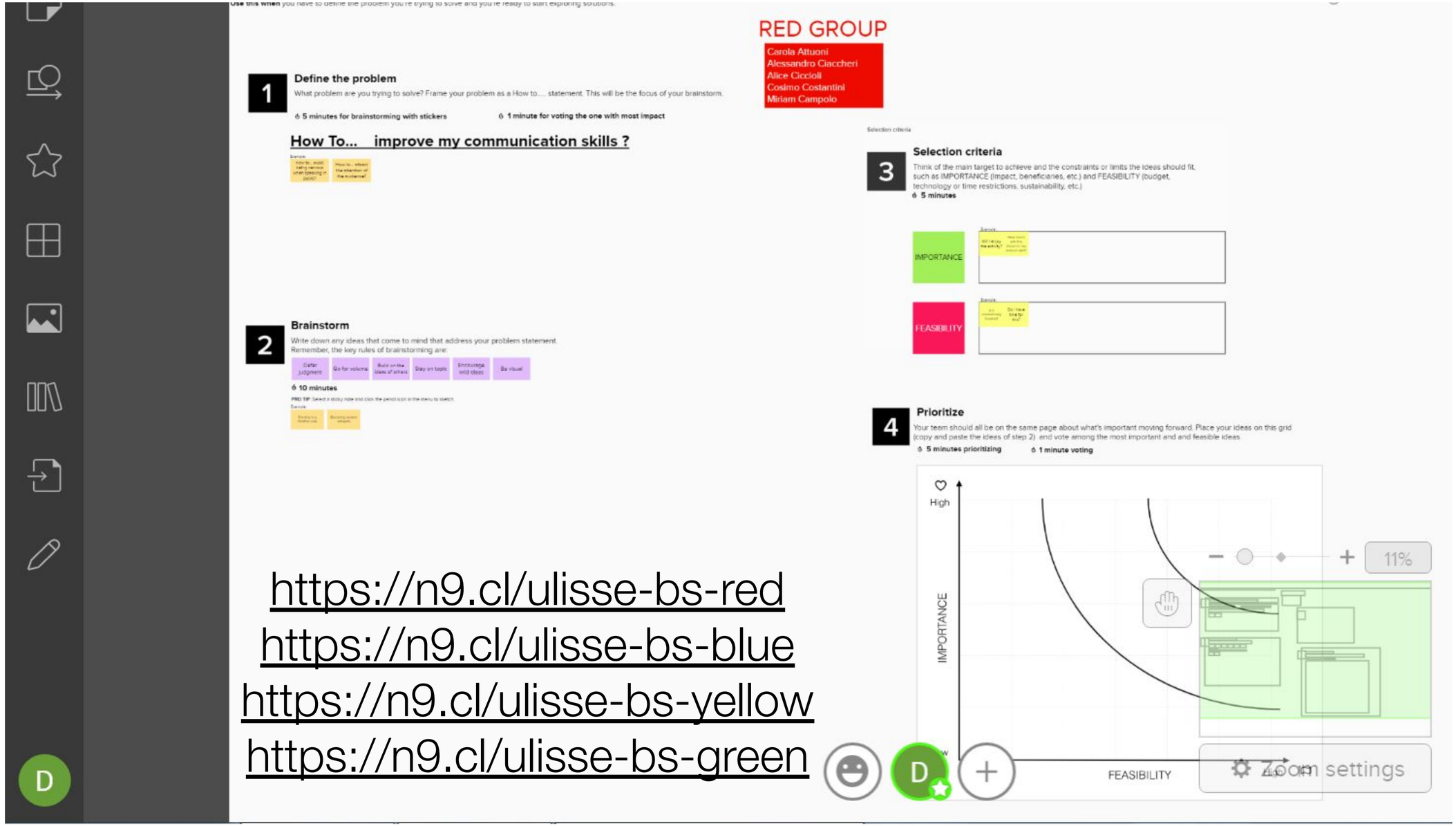
- What did you learn in this experience?
- What would you improve next time?
- In which contexts/problem can you use this technique?

https://n9.cl/ulisse-bs-red

https://n9.cl/ulisse-bs-blue

https://n9.cl/ulisse-bs-yellow

https://n9.cl/ulisse-bs-green



https://n9.cl/ulisse-bs-red
https://n9.cl/ulisse-bs-blue
https://n9.cl/ulisse-bs-yellow
https://n9.cl/ulisse-bs-green

- What did you learn in this experience?
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Fostering CREATIVITY

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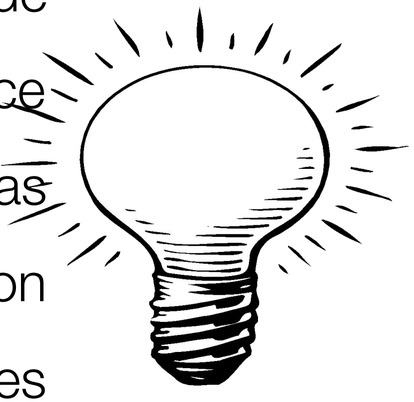
To encourage and stimulate creativity do not forget...

1. Preparation - pre-reflection on the problem
   Mood disposition, positive mental attitude
   Openness: freeing yourself from prejudice
   Receptivity to new ideas
   Enthusiasm for the enjoyment of creation
   Stimulation, activating mental and emotional processes
   Concentration
   Expression of thoughts and ideas



Source: https://bitrebels.com/design/20-ways-to-stimulate-your-own-creativity/

Where would be useful the learning you got today?

When/Where are you going to use creativity techniques?

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What PERSPECTIVE did you change regarding Creativity?

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How has this workshop CONTRIBUTED to improve your skills?

The voting code:

What did you LEARN/TAKE from this workshop?

https://www.mentimeter.com/s/b16dcc2b15372678e6cab4468d775b81/616236102241/edit

How would you use CREATIVITY to help a homeless blind?

https://www.youtube.com/watch?v=Hzgzim5m7oU

NOW IT'S YOUR TURN TO BE CREATIVE

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Bibliography

- BERMEJILLO, A. (2012). El ser creativo.
- DE BONO, E. (1985). Six thinking hats.
- DE BONO, E. (1992). Serious Creativity: Using the Power of Lateral Thinking to Create New Ideas
- DE BONO, E. (1967) The Use of Lateral Thinking
- DE BONO, E. (1981). Atlas of Management Thinking.
- BUZAN, T. (2006). The Ultimate Book of Mind Maps
- DAMASIO, A. (2010). Self comes to mind.
- GARDNER, H. (2010). Creating minds.
- JOHNSON, S. (2010). Where Good Ideas Come From: The Natural History of Innovation.
- LLORENTE, J. (2010). Piensa, es gratis: 84 ideas brillantes para potencia el talento.
- MEDINA, A. (2007). Ideas para tener ideas. Madrid: Prentice- Hall.
- MICHALKO, M. (2001). Cracking Creativity.
- SÁNCHEZ MANZANO, E. (2010). La inteligencia creativa,.
- SEFCHOVICH, G. (1993). Creativity for adults.
- STERNBERG, R.J. (1999). Creativity.

Thank you Very Much

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