

# ENTRECOMP: 1.2 Creativity

Arab College of Applied Sciences

*Duration: 6 hours*



**Co-funded by  
the European Union**

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them.

# Project Consortium

## Coordinator:



## Partners:



## Project Details

**Title:** “Joint Development, Piloting, and Validation of Entrepreneurial Mindset and Key Skills Curricula and Training Materials for Third Countries”

**Acronym:** EMSA (Entrepreneurial Mindset and Skills for All)

**Agreement Number:** 101092477 – EMSA – ERASMUS-EDU-2022-CB-VET

**Programme:** Erasmus+ Capacity Building in the Field of Vocational Education and Training (VET)

**Call for Proposals:** ERASMUS-EDU-2022-CB-VET

**Start Date:** 01.01.2023

**End Date:** 31.12.2025

## 1.2 Creativity

### Training Aim

The primary goal of this workshop is to equip participants with the essential knowledge, skills, and competences required to excel in the realm of creativity. Upon completing this workshop, participants will have the capability to define and elucidate the fundamental principles and concepts that underlie creativity. They will gain profound insights into concepts such as divergent thinking, which involves generating a diverse array of ideas, ideation techniques that offer methods for nurturing creative ideas, and the creative process, elucidating how creativity evolves from idea inception to practical implementation. This knowledge forms a solid bedrock upon which participants can base their creative pursuits.



# 1.2 Creativity

## Learning Outcomes

In terms of **knowledge**:

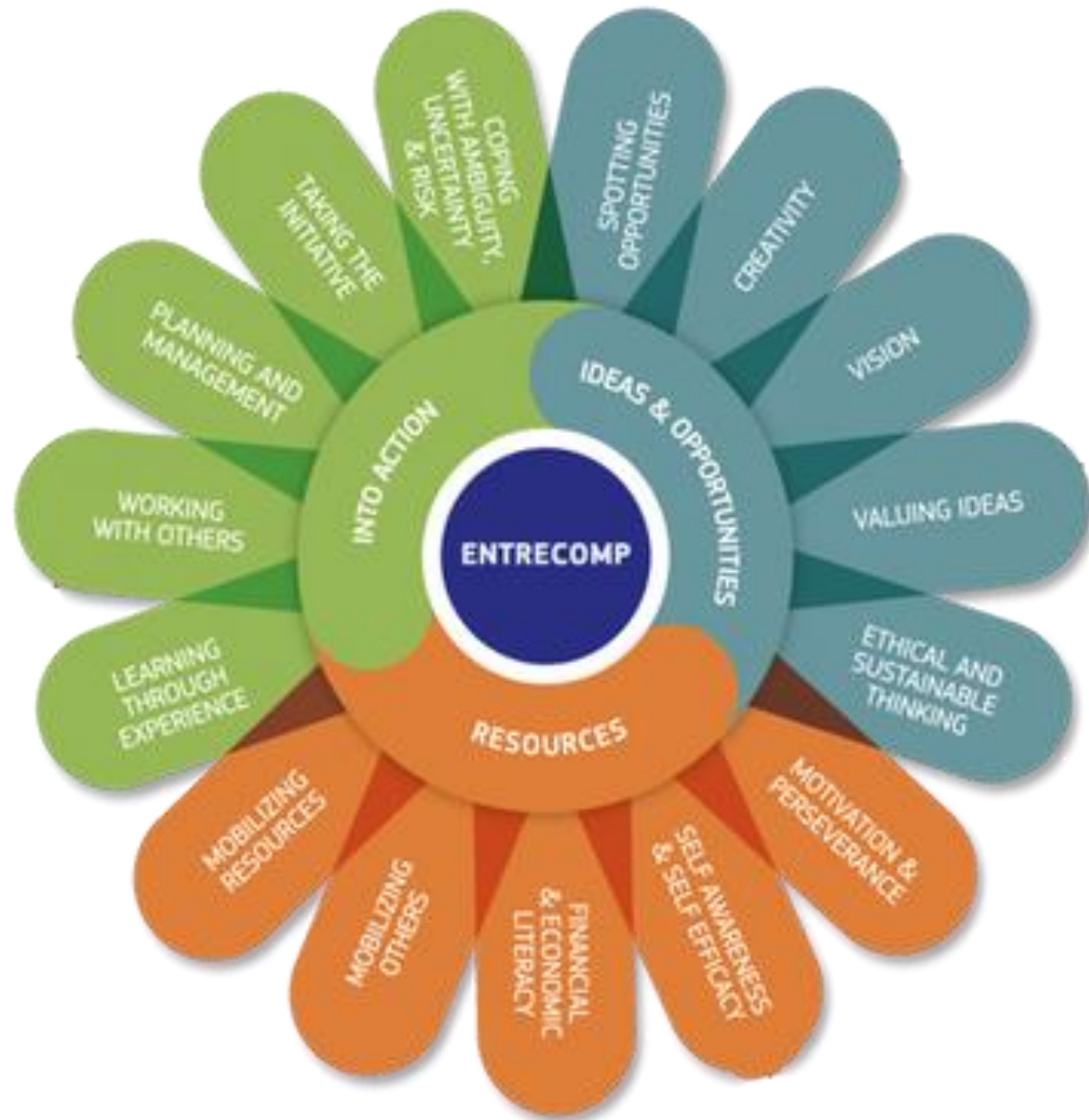
- ✓ *Define and explain the core principles and concepts of creativity, including divergent thinking, ideation techniques, and the creative process.*

In terms of **skills**:

- ✓ *Apply various creativity tools and methods, such as brainstorming, mind mapping, and lateral thinking, to solve real-world problems effectively.*

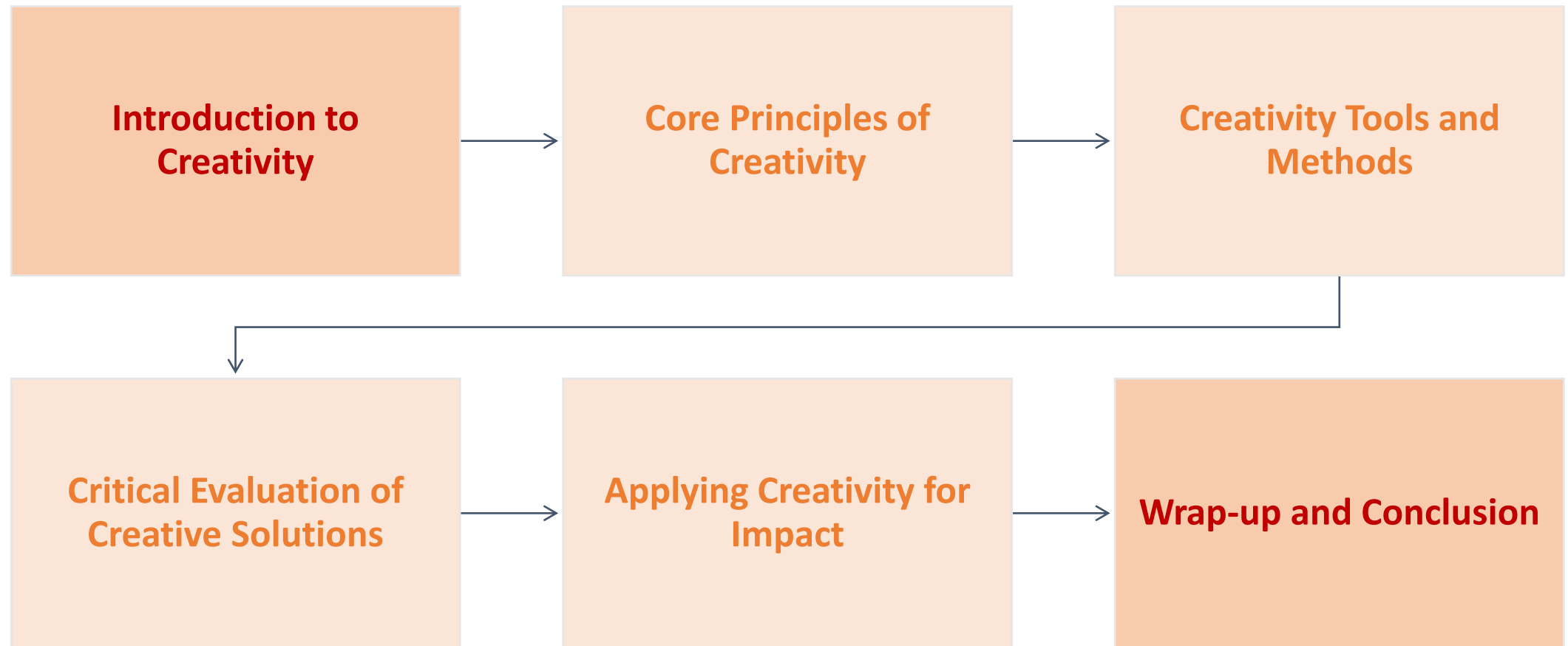
In terms of **competences**:

- ✓ *Demonstrate creativity by assessing the impact of creative solutions on the project's success, providing recommendations for improvements, and adapting their creative approaches based on feedback and results.*



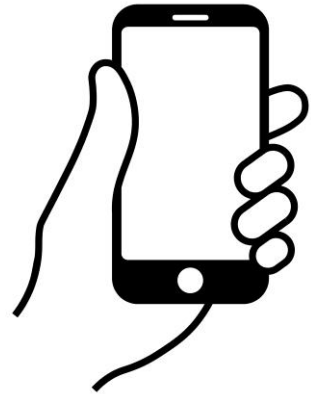
What ENTRECOMP  
competence  
is our training about?

# Training Route Map

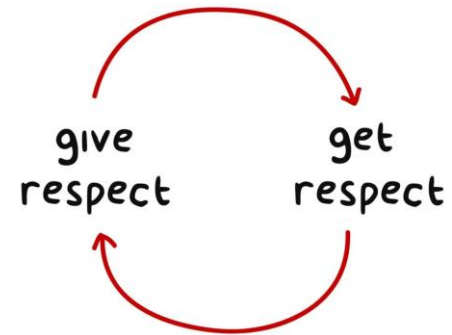




# Training Rules

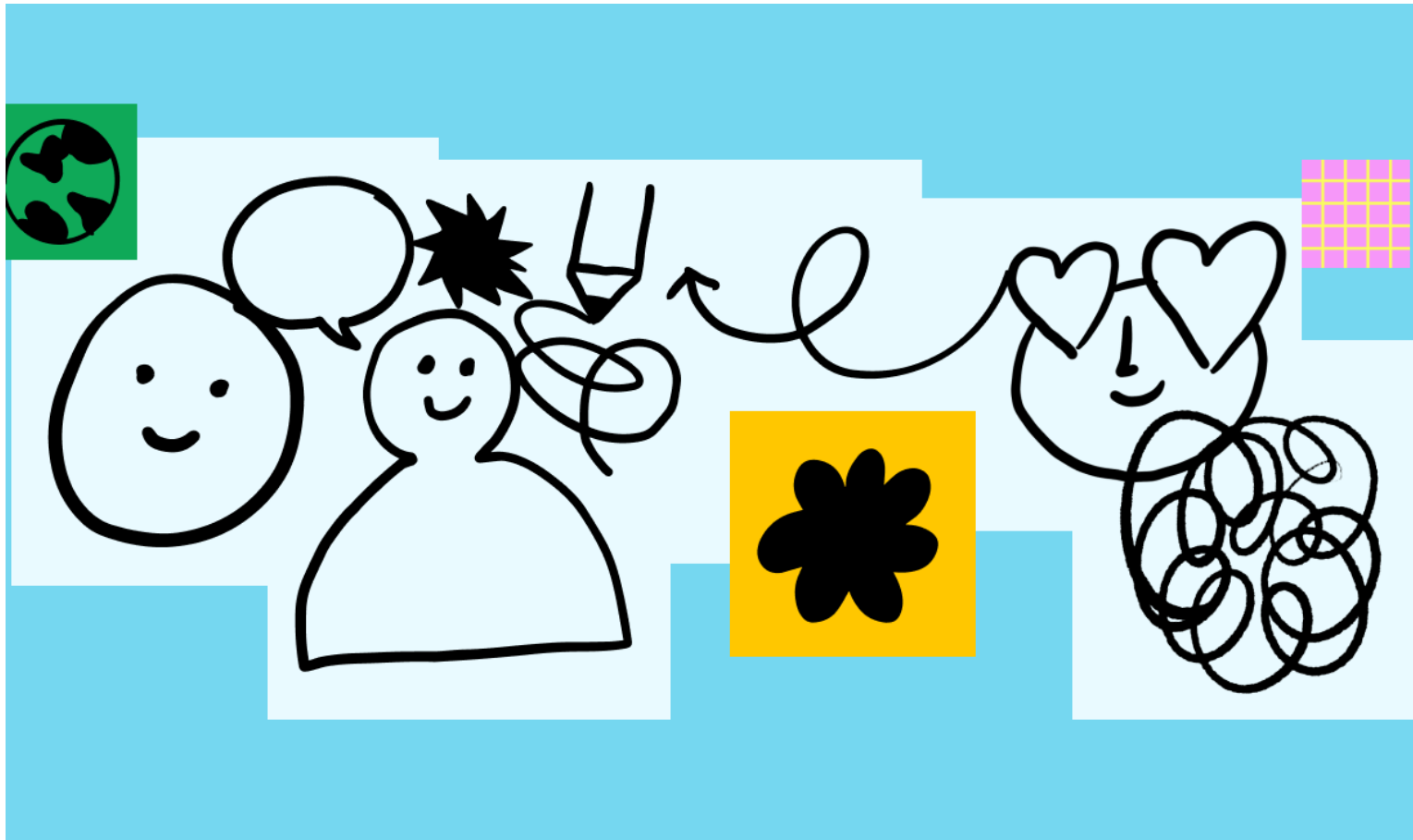


**Participation**

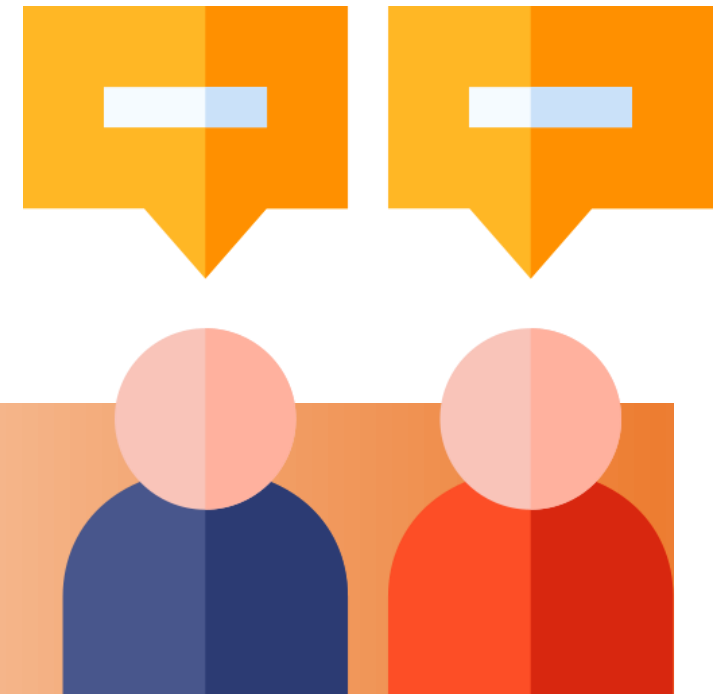


**YOUR  
OPINION  
MATTERS**





# Word Association Story



# Introductions

*Let's get to know each other!*



*“Do not go where a path may lead, go instead where there is no path and leave a trail” – Ralph Waldo Emerson.*

# Introduction to Creativity

# Unlocking Creativity: A Journey into Innovation

- In today's dynamic and ever-evolving business landscape, creativity is a key driver of entrepreneurial success. This workshop will explore the essential aspects of creativity within the framework of ENTRECOMP, providing valuable insights and practical strategies for harnessing and cultivating creative thinking in the entrepreneurial context.



# CREATIVITY

In the dynamic landscape of entrepreneurship, creativity is not merely an artistic flair; it is a powerful driver of innovation, problem-solving, and the ability to seize opportunities. The European Commission's Entrepreneurship Competence Framework (ENTRECOMP) identifies creativity as a fundamental skill, acknowledging its role in fostering an entrepreneurial mindset.



## "Empowered Entrepreneurs": Unleashing Creativity for Competitive Success"

This workshop seeks to furnish participants with a comprehensive comprehension of creativity, coupled with the practical tools and competences essential for effective application in real-world scenarios. By defining, applying, assessing, and adapting their creative approaches, participants will be well-prepared to contribute substantially to the triumph of their organizations or projects through inventive thinking and adept problem-solving, thus fostering a culture of creativity within their respective environments or endeavors.





# 1. Introduction to Creativity

*Definition of creativity*

*What is Creativity in relation to ENTRECOMP Framework*

*Elements of creativity*

*The creative process*

# What is Creativity?

- **What is Creativity?**

- ✓ Creativity / Creative Thinking / Inventive Thinking is thinking up new things.
- ✓ According to Oxford English Dictionary, Creativity means: to use / involve one's own thought or imagination to create something new as work of art, an invention.



## Do we have one definition for Creativity?

A handwritten word "Creativity" in black ink, written in a cursive style. The word is slanted upwards to the right and has a long, thin vertical line extending downwards from the bottom right of the letter 'y'.

- **No! Creativity** is a complex and multi-faceted concept, and there isn't a single universally accepted definition. However, within the ENTRECOMP (Entrepreneurship Competence) framework, creativity can be understood and defined in the context of its role in fostering entrepreneurial success.
- **According to Boden (1998)**, there are three main types of creativity, involving different ways of generating the novel idea's).
  - ✓ **The "combinational" creativity** that involves new combinations of familiar ideas.
  - ✓ **The "exploratory" creativity** that involves the generation of new ideas by the exploration of structured concepts.
  - ✓ **The "transformational" creativity** that involves the transformation of some dimension of the structure, so that new structures can be generated.

## What is Creativity in relation to ENTRECOMP Framework

- **Creativity** in the ENTRECOMP framework refers to the ability of entrepreneurs to generate and apply novel ideas, approaches, and solutions in the pursuit of opportunities. It involves thinking outside the conventional boundaries, envisioning innovative possibilities, and adapting to changing circumstances. In this context, creativity is not confined to artistic expression but extends to a strategic competence that underpins various entrepreneurial activities.

## Entrepreneurial Competence and Creativity

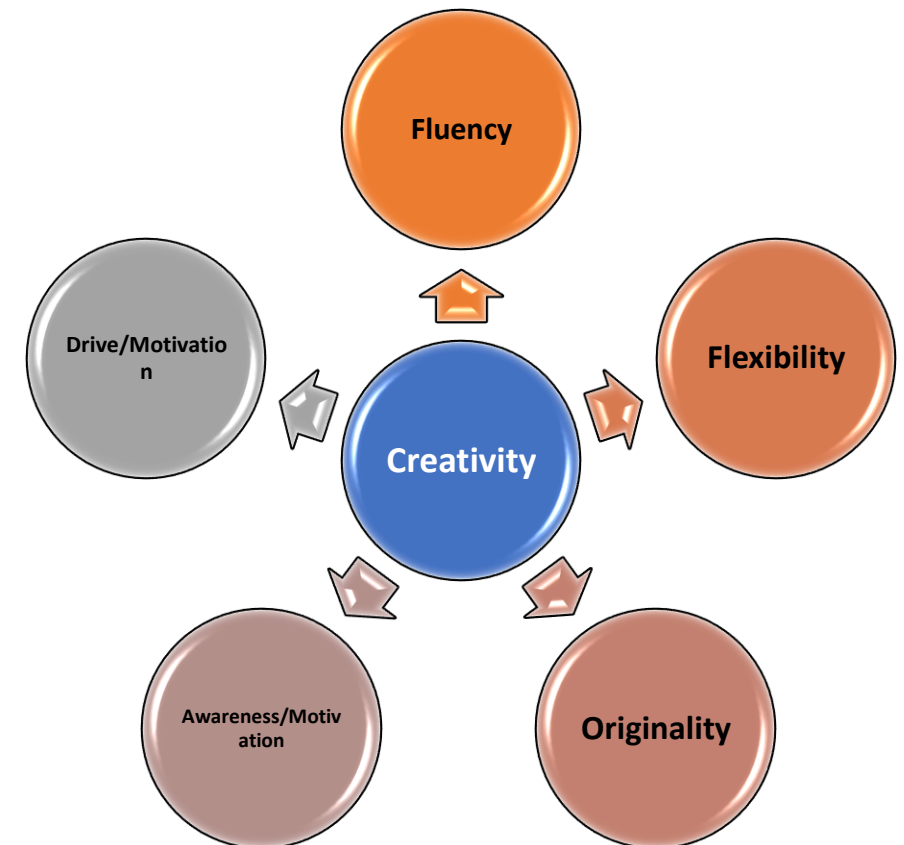
- Introducing the concept of ENTRECOMP—Entrepreneurship Competence—a framework that encapsulates the skills, attitudes, and behaviors essential for entrepreneurial success.
- Creativity is a fundamental component of ENTRECOMP, intertwined with skills like opportunity recognition, risk-taking, and adaptability.

# Elements of Creativity

**Creativity** is a multi-faceted and complex phenomenon, and its elements can vary across different contexts. However, several key elements are commonly associated with creativity. Here are some fundamental elements of creativity:

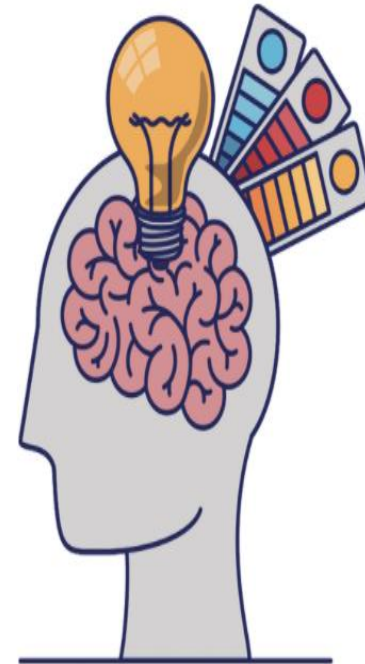
According to Porter, Creativity has five elements:

1. **Fluency** which means the ability to provide ideas in volumes. It means having lots of ideas, but the ideas may not be necessarily unusual.
2. **Flexibility** which means the ability to convert familiar concepts into new shapes or jump from old concepts to new ones.
3. **Originality** which means the ability to create unusual ideas. It must lead to something novel or unique.
4. **Awareness- Imagination** to perceive connections & possibilities beyond obvious.
5. **Drive or Motivation** - to think up new ideas



## The 5-Step Creative Process: Navigating Creativity

**The creative process** is a dynamic and iterative journey through which individuals or groups generate, develop, and communicate new ideas, solutions, or expressions. It involves a series of stages and activities that help bring about original and valuable outcomes. While different models describe the creative process in various ways, a common framework includes the following **stages**:



# The Creative Process

**1. Preparation:** This stage involves gathering information, defining the problem or challenge, and understanding the context. It's about immersing yourself in the subject matter, exploring relevant data, and gaining insights.

**Activities:**

- **Research:** Collect data and information related to the problem or challenge.
- **Define the Problem:** Clearly articulate the issue or opportunity.
- **Immersion:** Immerse yourself in the context to understand the nuances.





**2. Incubation:** This stage is about allowing ideas to incubate and germinate in the subconscious mind. It involves stepping back from the problem, giving your mind some space, and allowing connections to form.

**Activities:**

- Step Away: Take a break from active problem-solving.
- Engage in Diverse Activities: Allow your mind to wander and explore unrelated activities.
- Let Ideas Simmer: Allow thoughts and ideas to percolate in the background.



**3. Illumination (or Insight):** This is the "aha" moment when a creative solution or idea suddenly becomes clear. It's often characterized by a sudden burst of inspiration or realization.

**Activities:**

- Capture Insights: Keep a notepad handy for sudden flashes of inspiration.
- Mind Mapping: Visualize connections between ideas and concepts.
- Brainstorming: Engage in group or individual idea generation sessions.



**4. Evaluation:** In this stage, ideas are critically examined, refined, and evaluated for feasibility, practicality, and alignment with the defined problem or challenge.

**Activities:**

SWOT Analysis: Assess strengths, weaknesses, opportunities, and threats.

Feasibility Check: Consider the practicality and resources required.

Prototype or Mockup: Create a preliminary version to test and evaluate.



**5. Implementation:** This final stage involves turning the selected and refined idea into action. It includes planning, execution, and monitoring the implementation of the creative solution.

**Activities:**

- Develop an Action Plan: Outline the steps needed for implementation.
- Execute: Put the plan into action.
- Monitor and Adjust: Track progress and make adjustments as needed.



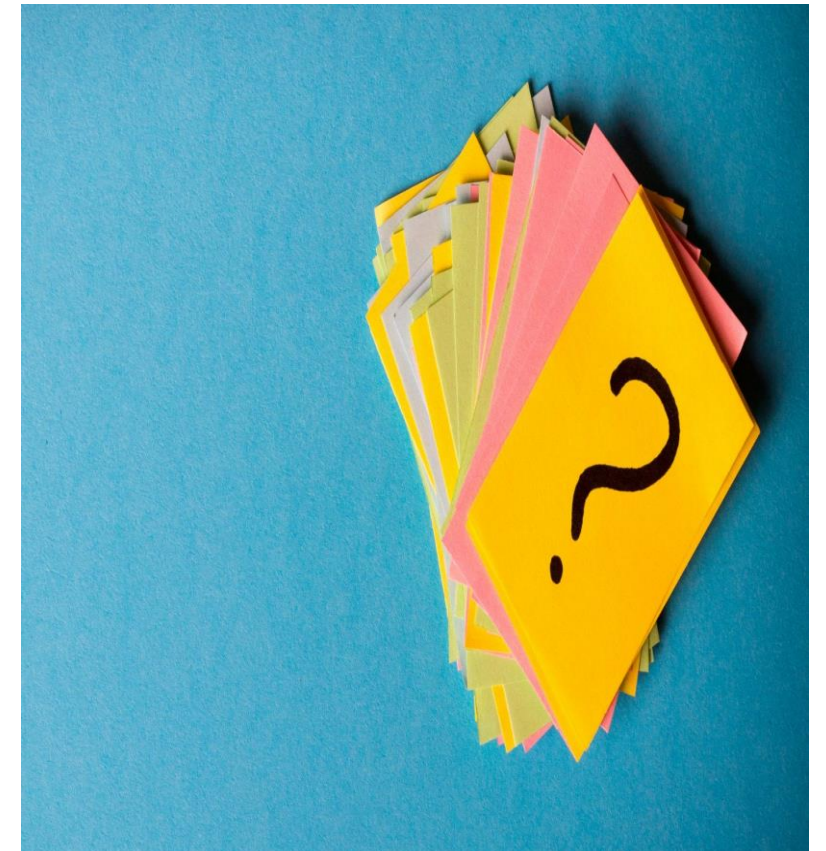


Applying the 5-step creative process provides a structured approach while allowing flexibility for individual or team preferences.

It's a guide to navigate the complexities of problem-solving and idea generation in a methodical yet imaginative way.

## Discussion: Creativity Unveiled; Insights and Reflections Q&A

- What, in your own words, is creativity, and how would you describe its significance in personal and professional contexts?
- How has your perception of creativity evolved or changed after the introductory session?
- Can you share a personal experience where creativity played a significant role in your life or work?
- How did you find the "Word Association Story" ice-breaking activity? Did it influence the way you think about creativity?
- In your opinion, why is creativity considered a key driver of innovation and problem-solving?
- Can you share examples from your experiences where creativity led to positive outcomes or innovative solutions?





## 2. Core Principles of Creativity

*Divergent Thinking*

*Ideation Techniques*

*Curiosity and Openness*

*Resilience in the Face of Failure*

*Flexibility in Thinking*

*Synthesis of Ideas:*

*Mindfulness and Reflection*

*Collaboration and Diversity*



# Core Principles of Creativity

The core principles of creativity are fundamental concepts that underlie and guide the creative thinking process. These principles provide a framework for approaching problems, generating ideas, and fostering an environment conducive to innovation. Let's delve into each of these core principles:



# Core Principles of Creativity

No	Principle	Definition	Importance	Application
1	<b>Divergent Thinking</b>	Divergent thinking involves exploring multiple possible solutions or ideas rather than focusing on a single solution.	It encourages the generation of a wide range of ideas, promoting creativity and innovation.	Brainstorming sessions, mind mapping, and other ideation techniques.
2	<b>Curiosity and Openness</b>	Curiosity is the desire to learn and explore, while openness involves being receptive to new ideas and perspectives.	Curiosity fuels exploration and discovery, while openness fosters a willingness to consider unconventional ideas.	Actively seeking knowledge, exploring diverse topics, and being open to feedback.

# Core Principles of Creativity

No	Principle	Definition	Importance	Application
3	<b>Resilience in the Face of Failure</b>	Resilience is the ability to bounce back from setbacks, learn from failure, and persevere in creative pursuits.	Failure is often a stepping stone to success; resilience ensures the ability to learn and adapt.	Embracing failures as learning opportunities, maintaining a growth mindset.
4	<b>Flexibility in Thinking</b>	Flexibility in thinking involves adapting to different viewpoints, approaches, and strategies.	It allows for creative problem-solving by considering a variety of perspectives and solutions.	Applying design thinking methodologies, considering alternative viewpoints.

# Core Principles of Creativity

No	Principle	Definition	Importance	Application
5	<b>Synthesis of Ideas</b>	Synthesis is the process of combining different elements or ideas to create something new and innovative	It involves connecting seemingly unrelated concepts to generate novel solutions.	Integrating ideas from diverse fields, creating interdisciplinary collaborations.
6	<b>Mindfulness and Reflection:</b>	Mindfulness involves being fully present in the moment, while reflection allows for the thoughtful consideration of ideas.	It enhances self-awareness, promotes thoughtful decision-making, and fosters a deeper understanding of ideas.	Incorporating mindfulness practices into daily routines, setting aside time for reflection

# Core Principles of Creativity

No	Principle	Definition	Importance	Application
7	<b>Collaboration and Diversity</b>	Collaboration involves working together, and diversity brings varied perspectives and ideas to the creative process.	Collaborative and diverse teams enhance creativity by incorporating a range of viewpoints.	Building cross-functional teams, encouraging diverse participation in brainstorming sessions.
8	<b>Ideation Techniques</b>	Ideation techniques are structured approaches to generating creative ideas, often used during divergent thinking activities.	These techniques provide frameworks and methods to channel creativity effectively toward problem-solving.	Using different techniques including; SCAMPER Technique, Six Thinking Hats, Random Word Technique

## Brainstorming Exercise: Creative Principles in Action

Lets apply and discuss the core principles of creativity in solving a specific challenge or coming up with innovative ideas.





*"The only way to do great work is to love what you do." - **Steve Jobs***



# 3. Creativity Tools and Methods

*Brainstorming*  
*Mind Mapping*  
*Lateral Thinking*

## Rule of the Storm: Unleashing Ideas

**Brainstorming** is a creative problem-solving technique that involves generating a large number of ideas in a group setting. It was first introduced by advertising executive Alex Osborn in the 1940s as a way to encourage creative thinking and overcome inhibitions that might stifle the flow of ideas. The primary goal of brainstorming is to foster a free and open exchange of thoughts, allowing for the exploration of diverse perspectives and innovative solutions.



# Brainstorming Mastery

## Rules of Brainstorming:

To maximize the effectiveness of a brainstorming session, certain rules are typically established. These rules create an environment that encourages participants to think freely and express ideas without fear of criticism. Let's dive into a quick demonstration of a simulated brainstorming session;

### 1. Defer Judgment:

Our first rule is to defer judgment. This means we're not here to evaluate or critique ideas during this phase. Every idea is welcome.

### 2. Aim for Quantity:

The second rule is to aim for quantity. We want as many ideas as possible. The more, the better!

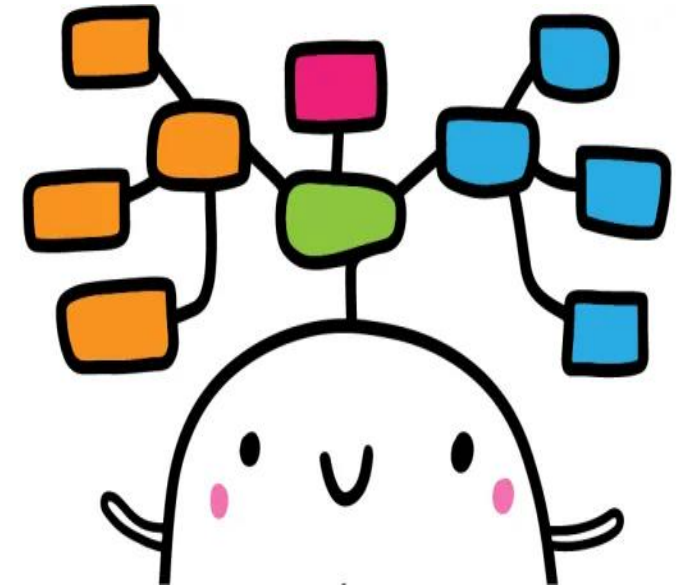
### 3. Encourage Wild Ideas:

Lastly, we encourage wild ideas. These are the out-of-the-box, unconventional thoughts that can often lead to unique solutions.



## Mastering Mind Mapping

**Mind Mapping** is a powerful visual tool designed to organize thoughts, ideas, and information in a highly interconnected and structured format. This technique is particularly effective for brainstorming, planning, and problem-solving. In a mind map, the central idea is placed at the center, with branching concepts radiating outward like a tree, creating a visual representation of the relationships between different elements.



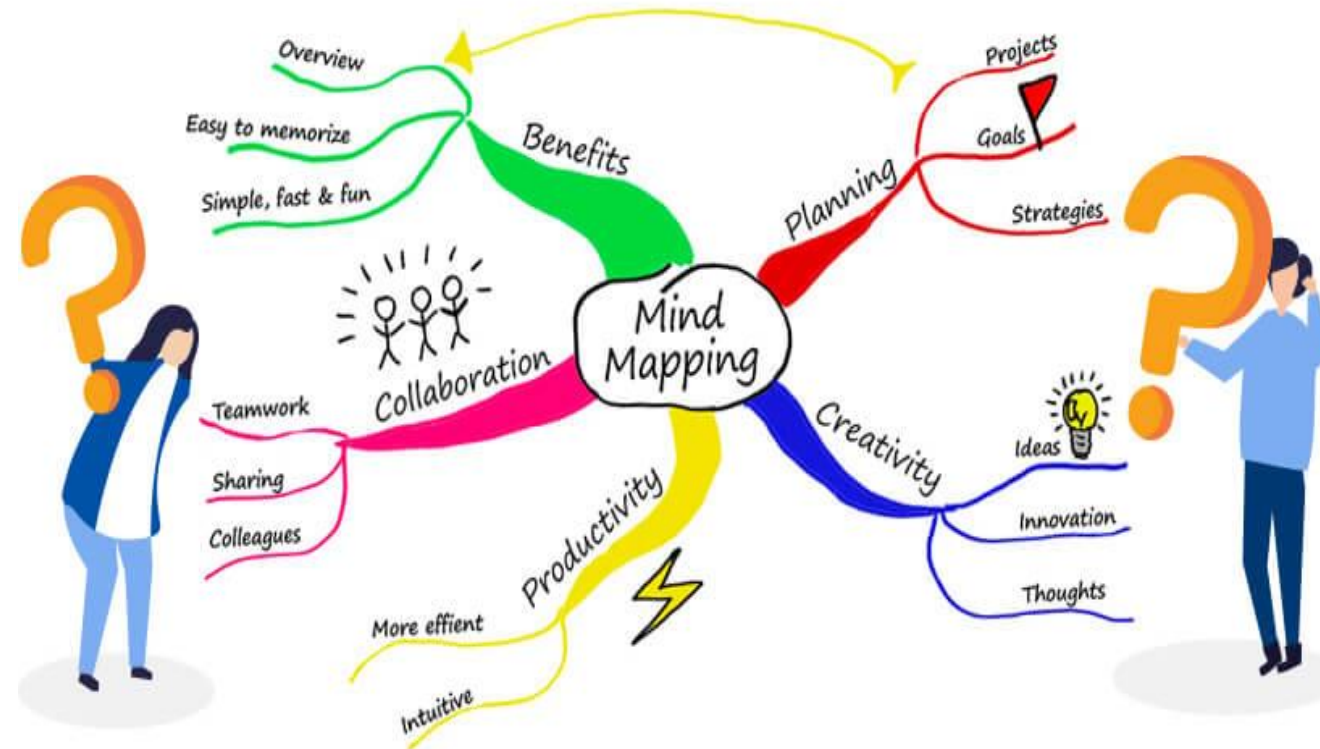
# Illustration: Mastering Mind Mapping

Let's delve into the world of mind mapping. Watch closely as I demonstrate the creation of a basic mind map.





# Group Exercise: Mastering Mind Mapping



# Lateral Thinking Mastery



## Thinking Sideways: Creativity Beyond the Obvious

Lateral thinking is a problem-solving approach that involves thinking indirectly and creatively to find innovative solutions. Unlike vertical thinking, which follows a logical and linear path, lateral thinking encourages individuals to explore unconventional avenues, challenge assumptions, and break free from established patterns of thought. It is a method that emphasizes generating unexpected ideas to arrive at novel solutions.



# Lateral Thinking Mastery

- ✓ Lateral thinking is about approaching problems from unexpected angles, often involving "out-of-the-box" thinking.
- ✓ It encourages breaking away from traditional thought patterns and considering unconventional solutions.
- ✓ This method is particularly effective in situations where standard approaches may not yield satisfactory results.



## Lateral Thinking Puzzles:

Let's delve into the fascinating world of lateral thinking. I'll present a lateral thinking puzzle to illustrate the need for thinking beyond the obvious.



# 4. Applying Creativity for Impact

*Brainstorming*  
*Mind Mapping*  
*Lateral Thinking*

## Introduction

**"Applying Creativity for Impact"** is about recognizing the potential of creative thinking to drive positive change. By fostering a culture that embraces creativity and strategically applying it to various aspects of life, we can achieve outcomes that have a lasting and meaningful impact on individuals, organizations, and society as a whole.

It involves leveraging imaginative approaches to problem-solving, innovation, and organizational growth



# Applying Creativity for Impact



Creativity in Problem-Solving



Creative Approaches to Product/Service Development



Fostering a Creative Organizational Culture

## Creativity in Problem-Solving

**Creativity in Problem-Solving** involves approaching challenges and obstacles with innovative and original thinking. It refers to the ability to devise inventive and unique solutions to issues or challenges. **HOW?**

### **Divergent Thinking:**

It encourages divergent thinking, where individuals explore a wide range of potential solutions rather than converging on the most obvious or traditional ones.

### **Unconventional Approaches:**

It involves breaking away from conventional problem-solving methods and embracing new, unconventional ideas.

### **Adaptability:**

Creative problem-solvers demonstrate adaptability and the capacity to adjust their approaches based on evolving circumstances.





## Success Story: "Airbnb's Survival and Growth During the Pandemic"

“

A number people have said that Airbnb is the worst idea that ever worked. Or at least I can say, everyone at the time seemed to say it was the worst idea ever, and it worked. So maybe that's the nice connection.

**Brian Chesky**

Co-Founder and CEO of Airbnb



# Creative Approaches to Product/Service Development

## CREATIVITY

is a driving force that propels innovation and progress in the development process across various industries. It goes beyond conventional problem-solving and introduces fresh perspectives, fostering the creation of products and services that stand out in competitive markets.

WHY?

creativity is paramount in the development process?

- 1. Creativity as the Catalyst:** Creativity is the engine of innovation, sparking novel ideas and approaches that challenge the status quo. It is the force that turns concepts into groundbreaking solutions.
- 2. Adaptability through Creativity:** Consumer preferences and market trends are dynamic. Creativity allows developers to adapt quickly, anticipating and meeting the ever-changing needs of users in an evolving landscape.
- 3. Differentiation in a Crowded Market:** In a competitive marketplace, creativity is the key to differentiation. It enables products and services to stand out by offering unique features, experiences, or functionalities.



- 4. Addressing Challenges Creatively:** Creativity brings a fresh lens to problem-solving. It encourages teams to explore unconventional solutions, often leading to breakthroughs that conventional methods might overlook.
- 5. User-Centric Innovation:** Creative development ensures a focus on the end-user. By understanding user needs and desires, developers can create products and services that resonate and provide meaningful experiences.

**6. Cross-Disciplinary Synergy:** Creativity thrives in collaborative environments where diverse perspectives come together. Interdisciplinary collaboration sparks innovation by combining insights from various fields.

**7. Human-Centered Creativity:** Design thinking, a creative problem-solving approach, emphasizes empathy and understanding user needs. It promotes the development of solutions that genuinely address users' pain points.

**8. Culture of Innovation:** A culture that encourages creativity fosters a continuous improvement mindset. Teams are more likely to seek better solutions, iterate on existing ideas, and embrace innovation as an ongoing process.

**9. Adaptability in Ambiguity:** Creativity thrives in uncertain and ambiguous situations. It equips development teams with the mindset to navigate uncertainties and find innovative solutions even when faced with challenges.

**10. Encouraging Curiosity and Risk-Taking:** A creative development process nurtures a culture of curiosity and risk-taking. It inspires teams to explore uncharted territories, experiment, and learn from failures.



# Applying Creativity for Impact

## Fostering a Creative Organizational Culture

### 1. Embracing a Growth Mindset: Encouraging Learning and Adaptability:

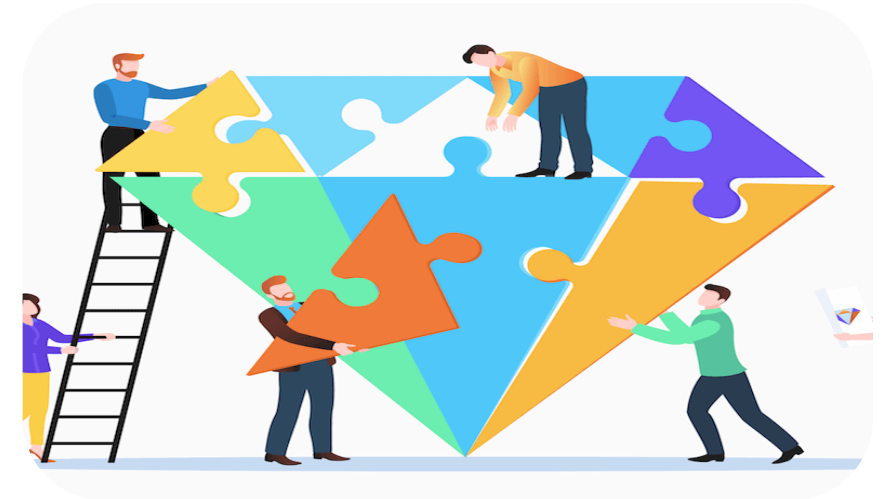
- Promoting a mindset that values continuous learning.
- Embracing challenges as opportunities for growth.

### 2. Open Communication and Collaboration: Breaking Down Silos:

- Creating an open and transparent communication structure.
- Fostering collaboration across departments and hierarchical levels.

### 3. Leadership Support and Modeling: Leaders as Role Models:

- Demonstrating a commitment to creativity at the leadership level.
- Encouraging risk-taking and innovative thinking.



## Fostering a Creative Organizational Culture

### 4. Providing Resources and Tools: **Investing in Creativity:**

- Allocating resources for training and development.
- Providing access to tools that facilitate creative collaboration.

### 5. Recognition and Rewards for Creativity: **Celebrating Innovation:**

- Implementing a system to recognize and reward creative contributions.
- Acknowledging both small and significant innovations.

### 6. Diverse and Inclusive Workforce: **Welcoming Diverse Perspectives:**

- Building a team with diverse backgrounds, skills, and experiences.
- Creating an inclusive culture where all voices are heard.



## Fostering a Creative Organizational Culture

### 7. Time and Space for Reflection: **Balancing Hustle with Reflection:**

- Encouraging employees to take breaks and reflect on their work.
- Allowing time for creative thinking and ideation.

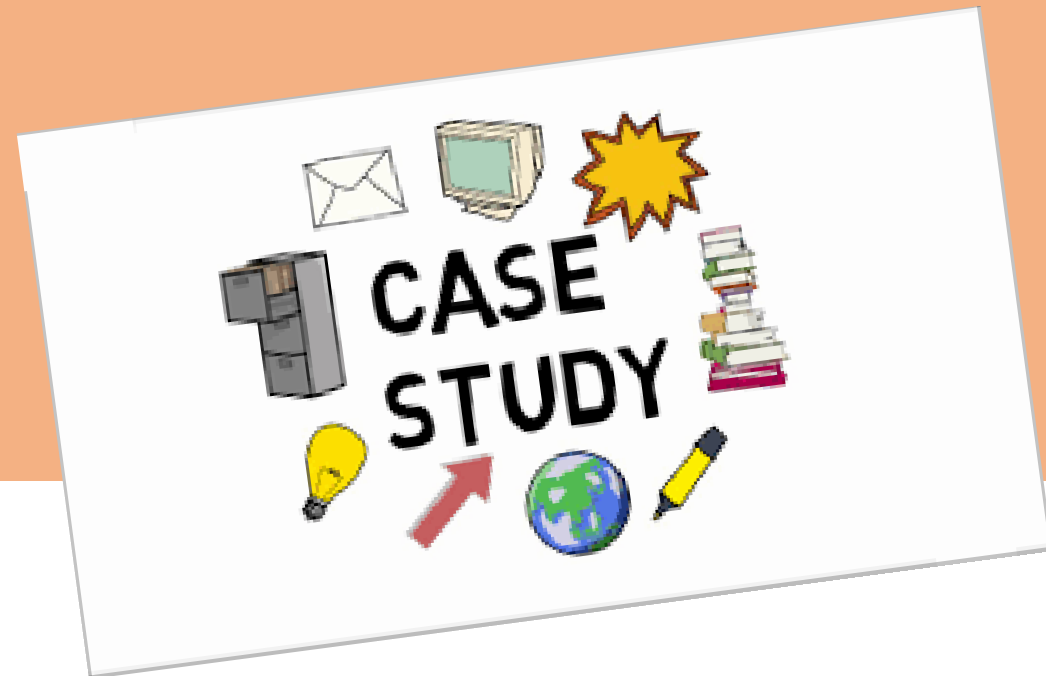
### 8. Encouraging Intrapreneurship: **Supporting In-House Entrepreneurs:**

- Encouraging employees to pursue entrepreneurial ideas within the organization.
- Providing a platform for intrapreneurial initiatives.



## Case Study:

Let's explore a case study focused on fostering a creative organizational culture. The case study revolves around a technology company, Tech Innovations, Inc., that successfully transformed its workplace culture to encourage and harness creativity.







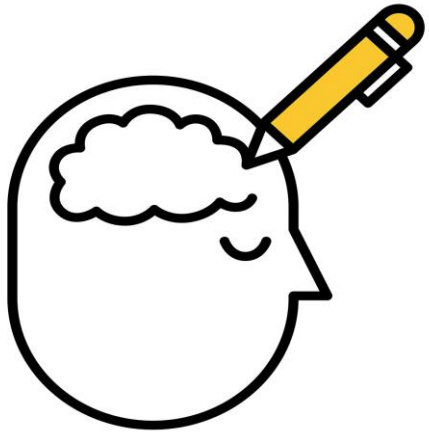
Revision



1. What is creativity, and how can it be defined?
2. Why is creativity important in personal and professional contexts?
3. How can a creative mindset contribute to personal and professional growth?
4. What was your experience with the "Word Association Story," and how did it contribute to creative thinking?
5. How can divergent thinking be applied in problem-solving?
6. How does flexibility contribute to creative problem-solving?
7. Recall the individual idea generation phase.
8. What were the most valuable lessons learned about fostering creativity?
9. Discuss how the concepts learned in the workshop can be applied in real-world situations.
10. Emphasize the idea of continuous learning in creativity.
11. What steps can you take to continue developing and applying creative thinking skills?
12. Encourage participants to provide feedback on the workshop.
13. How can the workshop be improved, and what aspects were particularly effective?



Do you have any questions?



What will you keep from  
today's training?

# Training Evaluation



# List of References

## **Books:**

- Creative Confidence: Unleashing the Creative Potential Within Us All" by Tom Kelley and David Kelley
- The Innovator's Dilemma: When New Technologies Cause Great Firms to Fail" by Clayton M. Christensen
- Provides insights on how to overcome self-doubt and tap into one's creative abilities.
- "Steal Like an Artist: 10 Things Nobody Told You About Being Creative" by Austin Kleon
- Offers practical advice and exercises to spark creativity in various aspects of life.
- "The Innovator's Dilemma: When New Technologies Cause Great Firms to Fail" by Clayton M. Christensen
- Explores the challenges companies face in adapting to disruptive innovation.
- Examines the habits and approaches of original thinkers and innovators.

## **Articles and Research Papers:**

- "The Role of Psychological Safety in Human Development and High-Performance Learning Organizations" by Timothy R. Clark.
- "The Five Minds of a Manager" by Jonathan Gosling and Henry Mintzberg (Harvard Business Review)

# List of Suggested Resources for Self-Directed Learning

## **Websites and Platforms:**

- TED Talks: The Power of Vulnerability by Brené Brown.
- Stanford d.school: Design Thinking Resources - Various articles and tools related to design thinking.

## **Podcasts:**

- "How I Built This" - NPR podcast featuring interviews with entrepreneurs and innovators.
- "The Creative Penn Podcast" - Interviews with authors, entrepreneurs, and creatives, with a focus on writing and publishing.

## **Creativity Tools:**

- MindMeister (Mind Mapping tool): <https://www.mindmeister.com/>
- Miro (Online Collaboration and Whiteboarding): <https://miro.com/>

## **Online Courses:**

- Coursera: Creative Problem Solving - Offered by the University of Minnesota.
- LinkedIn Learning: Innovation by Design - Instructor: Jocelyn Gleib.





Entrepreneurial Mindset and Key Skills for All

**Thank you!**



**Co-funded by  
the European Union**

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them.