### IDEATE A NEW PRODUCT/ DESIGN FROM ONE'S OWN VISION

OER: DESIGN THINKING, CREATIVE THINKING, CRITICAL THINKING, ART THINKING: APPLYING A DESIGN LED INNOVATION APPROACH TO THE ADVANCED TEXTILES SECTOR

### Objective & Scope

The scope of this learning activity is to get acquainted with the art-thinking approach in order to come with breakthrough oriented possibilities helping students concretely visualize their projects/ideas. The exercise is meant to activate as much as possible the different thinking strategies analysed in the OER in order to generate innovative solutions able to get something new but feasible into the market.

### Activity Question

Leveraging on your vision, feelings and experiences what innovative solutions come at your mind in relation to the proposed design challenge?

### Learning Goals

- To understand how creative, critical and art thinking work and their interrelationship with design thinking.
- · To apply different creative thinking techniques;
- · To use art thinking approach to generate radical ideas
- To create a new design / product by applying design led innovation to take weighted decisions and succeed into the market.

### Categories







**Business & Marketing** 



**Product Design** 

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- Jacobs, J. (2018). Intersections in Design Thinking and Art Thinking: Towards
   Interdisciplinary Innovation. Creativity. Theories Research Applications, 5(1) 4-25. <a href="https://doi.org/10.1515/ctra-2018-0001">https://doi.org/10.1515/ctra-2018-0001</a>
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#### Support material

References

- OER
- Summary presentation
- Templates for six thinking hats and SCAMPER techniques

### $\cdot$ $\,$ Meaningful pictures activating the design challenge

### **Equipment**

- Post-its
- Poster / Lego blocks / other materials to assembly for the prototype
- Computer

### Α.

# Visualize your own vision taking into consideration the existing gap with the current reality

#### 1.

Define a design challenge related to technical textile new applications and distribute to the students some meaningful pictures

#### 2.

Looking at the pictures students write down on post-it thoughts, feelings, considerations that come from their own life experiences

#### 3.

Each student is asked to identify their "What if..." key questions related to the pre-assignment

#### 4.

Students are put in pair and engaged in peer interviews using the defined questions. Responses are reported on post-it as well

#### 5.

Students will remain in pairs and will organise their post-it using the six thinking hats (template to provide) method

#### 6.

Each pair of students visualise their combined board sketching out one vision

#### 7.

Students are invited to brainstorm "How might we..." questions in relation to their vision in order to see problems that lie within the gap between the current reality and their vision, visualizing possible solutions



Around half a day



Individual



Discover a

### В.

### **Prototype your vision**

### 1.

Starting from the vision defined during the previous exercise, students are asked to research for existing services / products that could be competing with their own solution ideas

### 2.

List the features of these competing services / products, split them in different categories and imagine what the world would need in each category in the future (things that could be considered normal in the future but are not part of the current normal yet).

### 3.

Use SCAMPER technique (template to provide) to help ideate a new product/design. During this phase clearly establish key technical textile aspects i.e.: materials selection; technology; production techniques; functionalities; properties.

### 4.

Students are asked to prototype their ideas using 2D (i.e. Collage poster) or 3D (i.e. Lego blocks / materials assembly) techniques

### 5.

Each group will present their work to the others opening a peer discussion



Around half a day



Small Group Discussion



Develop & Deliver

### **SIX THINKING HATS**



### **FACTS**

What do you already know or need to find out?



### **BENEFITS**

What are the positives, values and benefits?



### **CAUTIONS**

What might go wrong?



### **FEELINGS**

How does it make you feel? Consider fears, likes and dislikes.



### **CREATIVITY**

What are the possibilities and alternatives?



### **PROCESS**

Usually the session leader wears this hat and is responsible for organizing the process.

## **SCAMPER TECHNIQUE**

S	SUBSTITUTE
C	COMBINE
A	ADAPT
M	MODIFY/ MAGNIFY
P	PURPOSE
E	ELIMINATE
R	REARRANGE/ REVERSE