## **TOOLKIT (MATERIALS)**

OER: SPECIALTY TEXTILE PRODUCTS

## Objective & Scope

The objective is to select specialty textile products, and design a toolkit for future designers. The main aim is to transfer knowledge about specialty textile products. The creation of a toolkit presenting several materials as case study to explain the speciality textile products. During the creation of the toolkits the designers will learn to select and know the most interesting materials. The aim of these material kits is to be used as a tool to facilitate the understanding and application potentials of textile products. The toolkit is a collection of material samples illustrating their physical properties, technical features and possible application areas through descriptive datasheets, graphs etc. This activity can offer students tools and methods to develop toolkits that will support designers.

## Activity Question

What are the physical properties, technical features and possible application areas of specialty textile products?

### Learning Goals

- · Scouting of speciality textile products (empower, connect, shape)
- · Discussion on the selected materials
- Mapping and selection of the most interesting material categories, understanding the technological and commercial advantages of specialty textiles
- ${\boldsymbol{\cdot}}$  Awareness of the broadness of the application potentials of textile materials

## Categories



Advanced Textile Technology



Sustainability

- Material Connexion. (n.d.). Material Connexion. Retrieved 2021, from <a href="https://materialconnexion.com/">https://materialconnexion.com/</a>
- · IDEO. (n.d.). Toolkit. Retrieved 2021, from <a href="https://www.ideo.com/search?q=toolkit">https://www.ideo.com/search?q=toolkit</a>

## References

 Understanding emerging materials and technologies: the Datemats EM&T toolkit. (2020, September). Datemats. Retrieved 2021, from <a href="https://www.datemats.eu/2020/09/28/understanding-emerging-materials-and-technologies-the-datemats-emt-toolkit-version-1/">https://www.datemats.eu/2020/09/28/understanding-emerging-materials-and-technologies-the-datemats-emt-toolkit-version-1/</a>

# Support material

- Miro and Jamboard
- OER
- · <u>Summary presentation</u>

## Equipment

· Computer or tablet

## A.

## Scouting of materials (materials toolkit)

#### 1.

## Scouting of materials (physical or virtual samples)

Research of material:

· Online research

## Websites, e.g.:

- https://www.itmc2021.com/
- https://asknature.org
- https://web.mit.edu/
- https://www.designboom.com/

## Material libraries:

- · https://www.materialconnexion.online
- https://materialdistrict.com/

Physical research at the Materially Library

#### 2.

## Selection of materials

- · Collective discussion on selected materials
- Select the most interesting materials. Selection criteria: advanced technology, sustainability, level of innovation
- Cluster of selected materials into areas (tools: MIRO https://miro.com/login/)

#### 3.

## Case study research

Search for other toolkits like:

- https://www.datemats.eu/resources/#oer (Report of the EM&T transfer toolkit version 1: pilot materials boxes)
- http://materialsexperiencelab.com/ma2e4-toolkitexperiential-characterization-of-materials
- · https://www.ideo.com/post/design-kit







Small Group Discussion



Discover

## В.

## Design toolkit (materials toolkit)

## 1.

## Design toolkit (materials toolkit)

Students will be divided into groups. This phase aims to generate ideas, using brain-storming.

Tool: Miro.

## 2.

## Concept

This phase aims to develop one or two concept and prepare a short presentation (1/2 slides for each concept). Within the presentation there will be sketches, key words and descriptive texts.

Tool: Jamboard.

## 3.

## **Usage guidelines**

This phase aims to develop guidelines for using the toolkits: descriptive datasheets, graphs etc.

Tools: Jamboard or Miro.



Less than or around an hour



Small Group Discussion



Develop