

MATERIALS SCENARIO

OER: TEXTILE RECYCLING TECHNOLOGIES

The objective of this activity is to define a scenario, starting from a research of signals & drivers. The topic of research is the future of textile recycling materials and technologies. The main thing to explore is the material and technological scenarios of the future (10 years from now). This activity can offer the students tools and methods to help with this, it might offer us a new way of seeing the world that we design for. Envisioning sustainability and recycling practices/visions/aesthetics starting from current trends, to imagine how the world will be and the future of textile recycling materials and technologies.

Objective & Scope

Signals: A signal of change is anything that is already happening today, that could be a clue to the future. A signal might be a new invention, product, business or behaviour. A signal could be the first successful demonstration of a new technology, or the first major breakdown of an old technology.

Drivers: Drivers are the forces of change that move us toward particular futures. Behind every signal, there is at least one driver. Looking at multiple related signals can help you spot the drivers.

Scenario: A scenario is a specific story set in a future. A scenario describes the future as if it were already real.

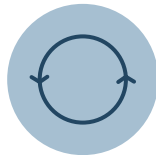
Activity Question

How will be the world of textile recycling materials and technologies in 10 years?

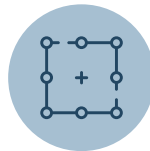
Learning Goals

- Provide students knowledge about advanced textile recycling technologies.
- Search signals and drivers (topic: textile recycling materials and technologies).
- Ability to construct scenarios and make choices to satisfy future goals.

Categories



Sustainability



Advanced Textile Technology

References

- Making the Future with Foresight. (n.d.). Institute for the Future. Retrieved 2021, from <https://www.iftf.org/home/>

Support material

- [OER](#)
- [Summary presentation](#)
- Platform for emerging technology:
 - <https://viz.envisioning.io/neuromancer/>
 - <https://techdetector.de/radar>
 - <https://www.envisioning.io>
- Platform for trends:
 - <https://www.wgsn.com/en/>
 - <https://www.trendhunter.com/>
 - <https://intelligence.wundermanthompson.com/>
 - <https://projects.qz.com/is/what-happens-next-2/>
 - <https://www.thefuturelaboratory.com/reports>
 - <https://www.homeof2030.com/>
 - <https://futuretodayinstitute.com/>
 - <https://futuretodayinstitute.com/trends/>
 - <https://trendwatching.com/>

Equipment

Computer or tablet, sheets of paper A2 size, pen, markers, post-it

A.

Textile recycling: materials and technologies: identify signal and drivers

1. Provide students knowledge about advanced textile recycling technologies.

This phase aims are to provide students knowledge about advanced textile recycling technologies. In order to illustrate the state of the art of chemical textile recycling technologies, a selection of case studies of commercially available products and processes has been evaluated.

Small group, tool: e.g. Miro pre-designed board.

2. Research Signals and Drivers

This phase aims are to search signals. The research will focus on advanced textile recycling technologies and materials.

Research of material:

- Online research

*Support material

Small group (4/5 students)



Less than or around an hour



Small Group Discussion



Define

B.

Scenario on textile technologies and (textile) materials

1.

Define trends

This phase aims are to define trends starting from signals (defined in the previous activity). Students can use keywords and images to describe trends (1 to 3).

Time: 15 minutes.

Small Group

Tool: Miro

2.

Define scenario

This phase aims are to define scenario starting from signals (defined in the previous activity). Students can use keywords and images to describe.

Time: 30 minutes.

Small Group

Tool: Miro

3.

Discussion

Discussion, starting from the scenarios, on the future of textile technologies and materials (focus on sustainability).

Time: 10 minutes. Group (entire class)



Less than or around an hour



Small Group Discussion



Develop