

BREAKING OUT THE SILOS! Interdisciplinary Approach to Sustainable Society

Riikka Irina Mäkikoskela¹, Nani Johanna Pajunen²

¹Aalto University, ARTS, Finland;

²Aalto University, CHEM, Finland

Abstract

The current state of environment has been achieved by acting linearly. Simultaneously, we know that transition towards sustainable society cannot be made the same way we have used to, trusting only the market economy and economic growth. Environmental improvements have been promoted, some progress has been made, but major steps towards sustainability have not been taken. Recent research has shown that the lofty words of sustainable strategies do not appear in operational activities. We have a new kind of cooperation as we combine two disciplines, engineering science and visual arts, for environmental research. This research combination makes the existing information visible in a new way, and this changes attitudes and ways to act by means other than traditional, linear rationality.

The objective of this research is to seek change in acting. We aim at increasing material efficiency, saving natural resources and extending product lifecycles via product design and material development. An art practitioner searches cyclically for creative solutions, which are tested and put into practice in the

same action. This is the way we now seek innovative solutions for circular economy.

We have tested our research combination in the first case study with the sandwich panel product of construction industry. The case was carried out in three workshops and two of them with the artistic research method and art education perspective. The artistic means raised the awareness of sustainabilities in the workshops. The artistic and pedagogical working methods of the workshops will be presented in detail in this paper.

Keywords

Visual arts, Engineering science, Environmental research, Sustainability, Circular economy.