



TexUnite

Project: 2024-1-DE01-KA220-HED-000253935 – TexUnite - Service Learning on Sustainability in Textile and Fashion Education

SL Project Title: WEAVING for a Better World Crafting Sustainability

Partner University: University of Ljubljana, Faculty of Natural Sciences and Engineering, Department of Textiles, Graphics Arts and Design, Ljubljana, Slovenia

Name of the Stakeholder: Tehnical Museum of Slovenia Bistra

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Executive Summary

As part of the Erasmus+ TexUnite project, sixteen first-year Textile and Clothing Engineering students led workshops on textile sustainability for primary school children. They introduced concepts of recycling, environmental awareness, fibre production, and the EU Textile Strategy, with a focus on hand weaving using natural and recycled materials. Participants received an Eco Weaver sticker and take-home instructions to continue weaving at home. The workshops promoted creativity, teamwork, responsible resource use, and intergenerational learning. The project concluded with an online exchange with students from Ege University in Turkey, strengthening international collaboration on sustainability.

Background and Context

By learning the basics of weaving with sustainable and recycled materials, students engage with the principles of sustainability and environmental awareness and responsibility. They explore the lifecycle of fibres, from yarn to fabric to garment, and become familiar with the goals of the EU Textile Strategy. Rather than studying only for exams, students applied their knowledge in practice, making the learning process more meaningful and long-lasting.

Objectives

- To introduce students to contemporary approaches in sustainable textiles.
- To promote environmentally responsible and creative practices.
- To develop practical weaving skills and confidence in applying textile techniques independently.
- To encourage reflection on reusing textile materials and reducing textile waste.
- To foster sustainability as a core future value.

Methodology

The project used a hands-on approach in which first-year Textile and Clothing Engineering students mentored primary school pupils during workshops at the Technical Museum of Slovenia. They introduced sustainability, recycling, and the fibre-to-textile journey through demonstrations and practical hand weaving with natural and recycled materials. Participants received Eco Weaver stickers and take-home instructions to extend learning beyond the workshops. The project promoted creativity, teamwork, and intergenerational learning, aligned with the EU Textile Strategy, and concluded with an online exchange with Ege University and an exhibition and donation of student-made scarves.

Implementation Details

The SL project was carried out within the courses Physical-Mechanical Properties of Textiles and Clothing and Textile Raw Materials (asst. prof. Klara Kostajnšek), involved 16, first-year Textile and Clothing Engineering students during the winter semester (1 October 2025–16 January 2026) and included 45 hours of seminar, practical, and other educational activities.

- Theoretical part: Students studied the EU Strategy for Sustainable and Circular Textiles, principles of the circular economy, textile waste reduction, recycling, product lifespan extension, and responsible consumption. They explored the textile life cycle, raw materials, and basics of weaving and fabric structures.
- Practical part: During four-day Textile Days at the Technical Museum of Slovenia in Bistra, students led workshops for primary school pupils on sustainability, recycling, and fibre-to-textile processes. They taught basic hand weaving with natural and recycled materials, and each pupil received an Eco Weaver sticker and take-home instructions.

Results and Impact

- Students strengthened their understanding of sustainability in textiles and the EU Strategy for Sustainable and Circular Textiles.
- The woven pieces were made into scarves for an end-of-year exhibition and later donated to vulnerable groups, symbolising community care and sustainability in practice.
- Students created a brochure with instructions for hand weaving using recycled materials, reinforcing their knowledge while developing teaching skills and promoting responsible material use.

Challenges and Lessons Learned

The main challenge was the limited time for learning and preparation, as the workshops had to be held on a fixed date. Working with first-year students was especially difficult, as they were still learning the basics and were not as independent as older students, which required extra guidance and support during the preparation and knowledge-building phase.

Reflection and Feedback

Students gained theoretical and practical knowledge of sustainability, circular textiles, and hand weaving, while developing pedagogical and organisational skills. The workshops were well received, especially the hands-on activities, though time constraints limited some participation. The experience was engaging and educational, encouraging public speaking, teamwork, and communication skills. Most students expressed interest in participating in similar projects in the future.

Future Directions

The OER packages will be finalised and uploaded to the ZOERR and EPALE repositories for open access.