ERGOSIGN - NOVEL LEARNING APPROACH FOR ERGONOMIC PRINCIPLES FOR DESIGNERS WORKING IN THE UPHOLSTERY AND SLEEP SECTORS BY VIRTUAL REALITY

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Abstract

The European furniture and sleep sectors are key drivers of sustainable growth with a significant contribution to economic health, competitiveness, creativity, innovation, employment and export. ERGOSIGN proposes the creation of a flexible learning pathway and learning programme in line with the needs of learners and companies in the furniture, sleep and related sectors that will improve enterprise’s innovation, expertise and added value.

ERGOSIGN aims to create online training materials on ergonomics applied to the upholstery and sleep industry developed by VET providers, who run their own specialized training according to the needs of these sectors, and universities, which respective departments are EU experts the field of ergonomics. From this main objective, several specific objectives are defined:

- To identify and understand skills gaps and needs of EU designers, trainers, and professionals in developing functional furniture and sleeping products that ergonomically comply with their specific use.
- To define joint curricula that will define and analyse the most suitable training paths addressing the skills gaps and needs identified.
- To develop learning, teaching and training materials focused on basic principles on ergonomics and specific ergonomic considerations and materials that contribute to the ergonomics of the final product (flexible polyurethane foams, TPU gels, fabrics, etc).
- To enhance the integration of Virtual Reality in learning, teaching and training and support learners and educational staff in improving the use of ICT and digital competences.
- To promote open access to teaching and learning content addressing traditional sectors in line with individual’s needs and expectations, reducing skills mismatches.
- Capacity Building in these Sectors: Establishing a stable Strategic Partnership that will promote active cooperation among enterprises, professional organisations and local/Regional Bodies in order to support high quality VET with a strong work based learning component.

ERGOSIGN will trigger modernization and reinforce work based education aligned to the needs and opportunities offered by traditional industries. It will provide and assess basic and transversal skills, such as entrepreneurship and digital competences. The open access training content and virtual tool will contribute to a more strategic and integrated use of ICTs and OER.

This learning approach will provide a better understanding and recognition of new skills and transversal competences. Target groups (staff from the furniture and sleep industry and VET staff, students and unemployed willing to focus their careers on these sectors) will have the chance of increasing their knowledge on electronic platforms and ICT tools that will improve their competences in their working lives and furthermore, will offer more opportunities for professional development. Their skills and competences will improve for employability and new business creation: Sense of initiative, entrepreneurship and digital competences.

Keywords: Upholstery, ergonomics, design, innovation, furniture, health, Virtual Reality.