



ABOUT XR4CRAFTS

The EU project "XR4CRAFTS - Extended Reality (XR) for crafts (manship)" is developing customized content and concepts for the use of augmented reality, virtual reality and VR haptics in the practical training of bricklayers, carpenters, painters and varnishers and parquet layers.



Technical Research
Centre of Furniture and
Wood of the Region of
Murcia

CETEM



SCP
School of
Certified
Professionals



A look back and ahead

XR4CRAFTS comes successfully to its end. The two years E project developed, tested, and evaluated with Extended Reality (XR) enriched teaching and learning scenarios in craftsmanship. The focus professions were bricklayers, carpenters, parquet layers, and painters. This included the pedagogic-sound use of Virtual Reality (VR) and Augmented Reality (AR) or Extended Reality.

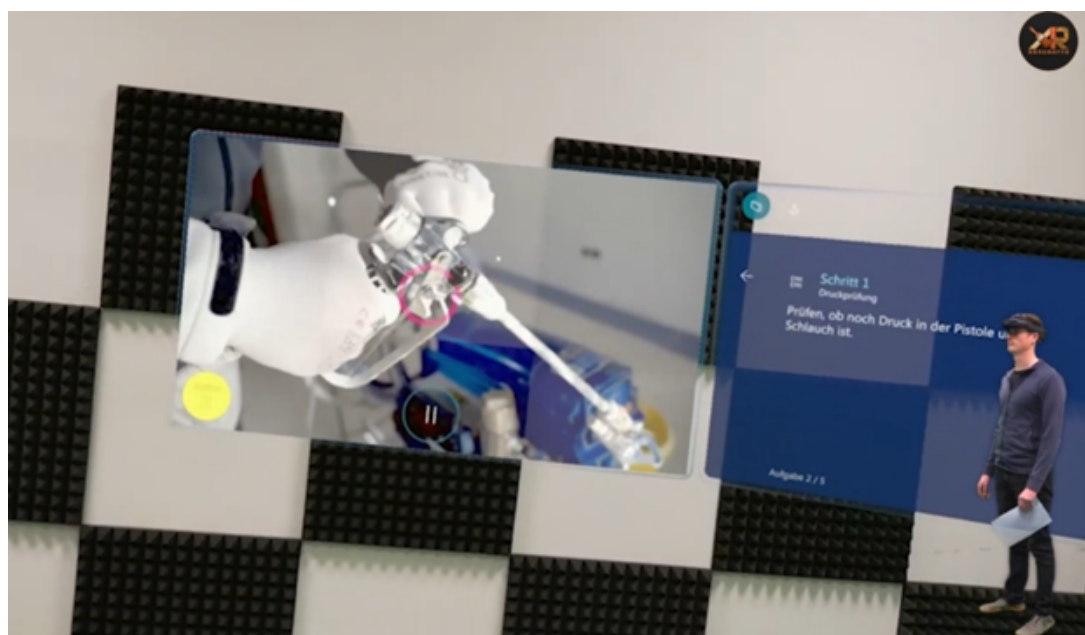


A novelty was the use of Virtual Reality optics. The project identified relevant haptic gloves, which have a similar touch and feel like normal safety gloves. The tailor-made use of these haptic gloves in craftsmanship is unique for practical VET in Europe. The tailored and pedagogic sound use 12 scenarios form the XR training site. Apprentices learned to use a technology e.g. airless (painter) or router use (carpentry) in a safe environment before they carry it out in reality. The haptic feedback (vibration focused) lead to a more reality like experience. This supported an easier transfer of the relevant work process from AR and VR into VET training reality.

In summary users from the focus professions tested the XR scenarios. Alongside with the pedagogic guidelines for trainers, which include hands-on knowledge on how to plan und how to use XR in practical craftsmanship training, first-hand insights are provided to VET teachers and trainers in the focus professions. The learnings obtained have the potential to be transferred to further crafts professions.



The results were presented in 4 national promotional events in Belgium (Dag van de Afwerking, Brussels), in France (Bordeaux), in Spain (Yecla Furniture Fair), in Germany (Learntec) with in total more than 830 participants.



To foster transfer into further professions and into science the XR4CRAFTS consortium presented their learnings on fairs and conferences like:

1. DELFI 2024 (Fulda, Germany; scientific conference)



2. LEARNTEC 2024 (Karlsruhe, Germany; fair on digital learning)



3. ALLVIEW final conference 2024 (Lyon, France)



The XR4CRAFTS outputs: pedagogic guidelines, Learning videos, best practice guide, and more are freely available here: <https://www.sbg-dresden.de/aktuelles/projekte/xr4crafts>.



ABOUT US

XR4CRAFTS develops, tests, evaluates and transfers teaching and learning scenarios enriched with digital media. Trainers and vocational school teachers receive pedagogic and methodological training in the use of augmented reality (AR), virtual reality (VR) and VR haptics in practical training. The focus of the two-year project (10/22-09/24) is on the following professions: Bricklayers, carpenters, painters and varnishers, and parquet layers.

If you desire updates on the project's advancements and its final outcomes, we invite you to express your interest. Comprehensive details will be unveiled and shared during the concluding conference in 2024.

For additional information about the project, please visit our [website](#) where you can find more comprehensive details."

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