

Bringing next-gen learning and knowledge assessment methodologies to EWF's system and STEM training

The WELDONE project aims to capacitate EWF System and STEM Educators, creating an active learning environment, with experiential learning and project work methods that encourage creativity and risk-taking, as a valuable learning opportunity.

Traditional learning methods are being challenged by the potential that technologies, coupled with new pedagogical approaches, hold to create a different way of learning, based on active learning and interaction. This is particularly felt in technical fields of knowledge, such as Manufacturing and STEM (Science, Technology, Engineering and Mathematics), where there is a lack of professionals to support the growth of new and existing companies. And new learning methodologies and technologies are one important way to attract students to these professions.

Bridging that gap between today's technologies' capabilities and attractive learning methods is the role of the WELDONE project, the aim of which is to provide EWF's System and STEM's educational staff with the knowledge, ability and expertise on pedagogical approaches and methodologies that promote active learning, that can be leveraged for a better training.

As an end result, the project will develop a Train the Trainers' (ToT) Curricula, based on seven Competence Units, organized in a modular approach to be delivered using the "Workshop Methodology," including practical resources focusing on the development of specific key competences to be embedded in technical training. EWF and its Education System are the main focus of WELDONE project, as all its results will be developed for application on Approved Training Bodies (ATBs) belonging to EWF network. In addition, WELDONE results will also be available for STEM Educators as a way to broaden its impact beyond the Manufacturing sector.

The WELDONE curriculum has seven Competence Units, organized in a modular approach, focusing on Multiple Intelligences and Learning Styles; Learner Centered Didactics (i.e. Problem-Based Learning, Critical Thinking and Collaborative Learning); Gamification; Digital Competences and using digital resources; News Media Didactics (the use of social media and micro-learning); Personal, social and learning competence and Entrepreneurship competences.

By fostering an active learning environment, with experiential learning and project work methods, where schools' environment can encourage creativity and risk-taking as well as accept mistakes as a valuable learning opportunity, teachers and trainers from EWF Training system, as well as educators from STEM sectors, will be able to embed the development of key competences on their own educational resources, following the European Commission's Council Recommendations.

WELDONE also paves the way for educators to be flexible in framing various pedagogical strategies and to be adaptable to diverse content, maximizing the use of digital tools and environments available today in order to bring trainees closer to real life situations, thus making learning a meaningful process for students of today and of tomorrow. Also, teachers and trainers

will be actively involved in this continuous professional development programme and on the EFW Communication process of raising their awareness to the importance of updating training methodologies and delivery in technical and scientific fields.

The project is implemented by a consortium of seven partners from Croatia, Belgium, Greece, Hungary, Portugal and Romania and, within its ambitious goals, it also aims at improving the provision of Higher VET, increasing its attractiveness and relevance, and promoting an assessment framework that will help trainers and teachers to deal with the challenges of evaluating the "WELDONE way".

Project partners

The consortium comprises entities with a broad experience in ERASMUS+ funded projects. The project coordinator is STRUKA (<https://www.struka.hr/en/>), a Croatian association for lifelong vocational education. The European Federation for Welding, Joining and Cutting (www.ewf.be); ISQ – Instituto de Soldadura e Qualidade (<https://www.isq.pt/>), a provider of scientific and technological support in Industry and Services; ASR - Romanian Welding Society (<https://asr.ro/>), an entity experienced in research, development and innovation in the welding sector; MATRAI Welding (<https://matraheg.hu/>), an Hungarian entity that plays an important role in regular state-recognized education and non-regular adult education; IOS - Industrial and Trade School Slavonski Brod (<http://www.ss-industrijsko-obrtnicka-sb.skole.hr/>), a secondary level vocational institution based on Croatia and Institute of Training & Vocational Guidance and IEKEP (<http://www.iekep.gr/en/>), a Greek entity expert in vocational guidance, administration, audit and management procedures.

Please access WELDONE website to be updated on the project's activities: <http://www.weldone-project.eu/>.

WELDONE - Boosting Innovation in Welding Training Project is co-funded by the Erasmus+ Programme of the European Union.