

# iQVET WP1:

Plan for implementation

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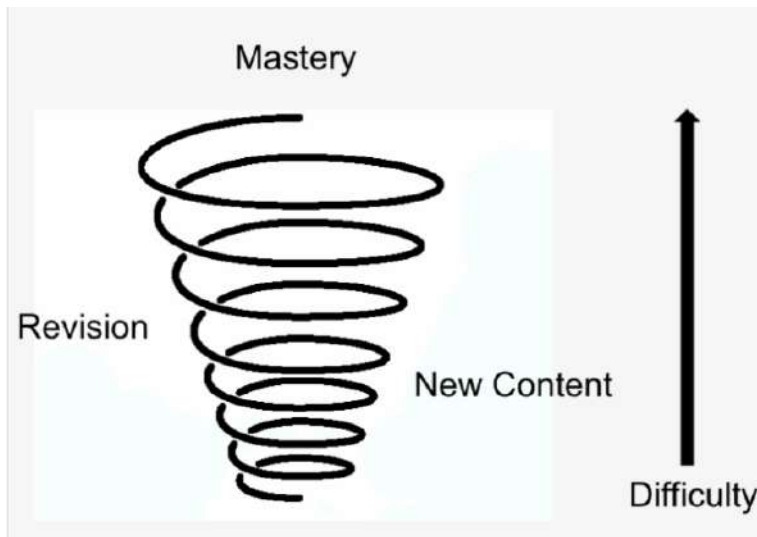
Institut za varilstvo d.o.o.



# Introduction

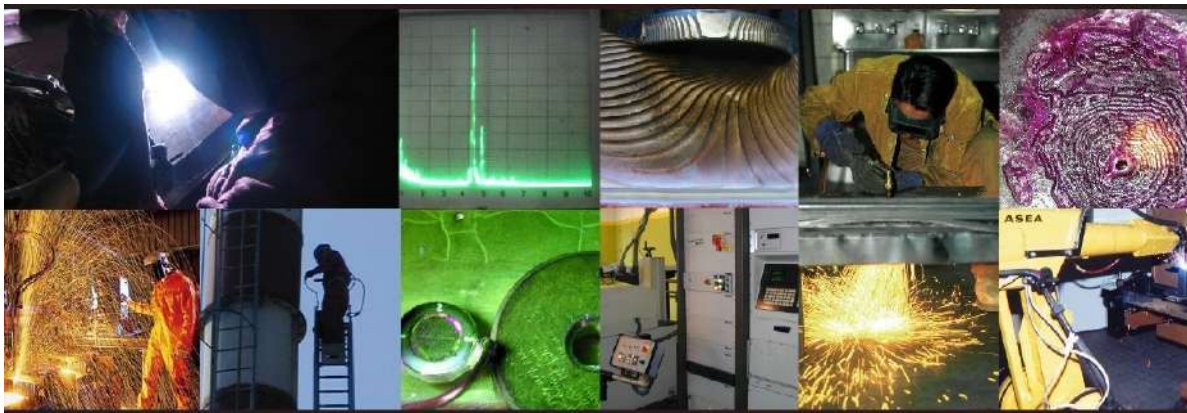
Until now theory on MIG MAG courses was given by classroom lectures and after that welding practice was given as mechanical skill without reverse connection with theory.

Institut za varilstvo will change old curriculum for MIG MAG welding course with inclusion of following andragogic and digital learning methods:



- Distance learning (**DL**) of welding theory combined with
  - online live Zoom lectures,
  - Moodle **LMS**,
  - **flipped learning** followed with
  - **remote pre-exam** and explanation theory understanding of attendees by homework.
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- theory will be enhanced, widened, and deepened through Learning by doing process (**WBL**) through alternated new content on 22 practical lectures (enhanced by silent knowledge of all 8 Slovenian certified welding instructors) and
  - 15 **Virtual welding** lectures.

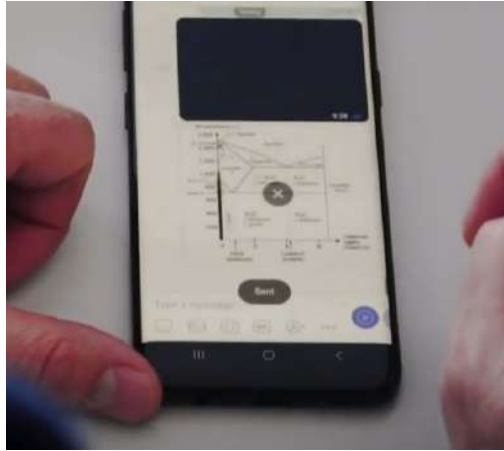
- **D 1.1 Developing a plan for a blended learning training program that is going to improve the use MIG-MAG welder course.**
- Practical lectures will be modernized, and combination of practice and theory will be defined as new curricula on basis of EWF, DVS guidelines and later optimized with iQVET project results. Connection of theory, Virtual welding and Practical welding will be optimized through the project, with use of new andragogical knowledge and experience exchange and silent knowledge of all certified Slovenian welding instructors.
- In practical work, theory will be given again as result of work-based needs and attendees knowledge will be revised again and again, step by step enforced with checking theory on practical results. Therefore, digital x-ray and mechanical tests will be added.
- We will define fully personalized flexibility to the training scope. Curriculum will have only recommended teaching hours for average attendee, exact speed of teaching will be personalized to each attendee. We will check if in practice one instructor can teach five candidates on different level of spiral at once.



## D 1.2. Hands on demonstration for the VET teachers



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### After system development of curricula:

- All the instructors (**train the trainers**) will be trained to use new system
- New certification system for all the instructors will be developed
- Examination procedures and questionnaires for instructors will be developed,
- Exams for instructors will be done together with practical knowledge exchange (we will try to get and optimize their **“Silent knowledge”**)
- Each teacher should do a seminar practical work and exams through third party society.
- Certification system for welding training centres should be developed.
- QA systems for welding training centres should be defined
- Audits should be done
- Issuing of certificates for welding schools and instructors should be done.
- Written guides for all the practical lectures shall be done
- We should integrate all theoretical lectures on LMS Moodle and Zoom
- We should prepare advertising materials for new system.



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### D 1.3 Piloting on MIG MAG course

For pilot course we should prepare:

- Working procedure for train the trainers, exams for the trainers, certification scheme for certified trainers
- Working procedure for welding school, certification of welding school, new system for welding courses, certification scheme for MIG-MAG welding, exams for MIG MAG welding, rules for certification and certification of the course
- Films for theoretical background lectures
- Moodle and ZOOM interface
- Optimization for lectures, especially practical work
- Then we should start with new system of training by pilot course



## D 1.4 Define final guidelines for new Blended learning MIG MAG course

Course curricula will be optimized with all project results and after optimization recognized and certified by local societies.



In frame of D 2.2 Our experiences should be spread by international Train the trainer's event in Hungary 2024 to all the partners.

In frame of D2.3 IZV will propose results of the project for European welding federation (EWF) Group responsible for new modern teaching approaches applied over than 15 European harmonized VET guidelines.

Preparation and optimization of promotional material for the course:

<https://www.youtube.com/watch?v=KLxvRFixfQ4&t=12s>

