“Interactive Exchange Workshop for VET Professional Teacher Training Program”

Hotel Residence Lake Balaton, Hungary

3/6/2024 – 7/6/2024



Come join in a unique experience with many teachers across Europe, which willinspire your creative energy and learning spirit. Visit a historical Hungarian area/city and create your own network by meeting people who use blended learning and methods for interactive learning in an interdisciplinary approach.

What is the Interactive Exchange Workshop on how to use blended learning andICT tools for Interactive learning?

The Interactive Exchange Workshop is going to address how methods applying blended learning introduce and enhance hands on interactive learning pedagogics. It is a hands on workshop for VET teachers and trainers who want to share their experiences on using receive instant or nearly immediate feedback in VET, and in other types of training courses. A professional network of instructors will guide you to the world of creating engagement in the classroom and to apply blended learning in outdoor learning activities.

This is a five-day workshop held at Hotel Residence Lake Balaton, Hungary, in a team of 25 teachers from 5 countries, with 5 facilitators from Sweden, Norway, Hungary, and Slovenia.

The concept

During this interactive workshop in the interesting environment of Lake Balaton, you will have the opportunity to exchange experiences and explore new possibilities that blended learning offer for creating and enhancing student active learning. This includessharing your own works while you learn from your colleagues and peers.

There is ample opportunity for informal discussions, casual conversation, one-to-one feedback, reflection, networking and the chance to create your own exercises and teaching activities in a small supportive group.

Group field trips as outdoor activity will introduce you to the world of Hungarian culture, while, at the same time, you will learn how to apply more blended learning for your students.

Objectives of the interactive workshop:

- to become more familiar with the tools and know-how necessary
- to gain confidence and acquire skills in managing tools use in the classroom
- to develop a repertoire of teaching skills and techniques and become able to make judgments as to when and how to use relevant tools and services
- to develop the ability to make choices with regard to teaching/learning materials

- to adapt or supplement them to cater for the specific needs of groups and individual adult learners
- to develop observation and analytical skills in order to evaluate how themethod is going on in the classroom

Learning Outcomes:

At the end of the course, you will acquire the knowledge and skills that will enableyou to:

- become aware of your own strengths and weaknesses in different areas ofblended learning tools, knowledge and expertise,
- develop a cooperative attitude both in relation to learners and colleagues,
- to become aware of the help and resources available for teaching (materials, reference materials, cooperation with colleagues, professional associations, etc.) as well as the avenues and resources available for further self-development beyond the training program
- explore and develop strategies to analyze the added value of new toolsand experiment them in the class.
- develop strategies for further development as professionals beyond the training workshop

The workshop is based on the principles of participatory VET and education, by embodying participants' experiences and fostering the exchange of their ideas. Its focus is not merely on the technical aspects of using blended learning tools for interactive learning but also on your personal knowledge gained through your experience with using tools supporting blended learning within teaching and training. We will have two sessions every day, morning and afternoon, with a lunch break and then we will be free to walk in the village and discover Modern Hungary.

You will take part every day in the workshop and, after an introduction by the facilitator, you will join different groups of teachers. You will be encouraged to participate in discussions addressing interactive blended learning that may facilitate enhanced communication and interaction in class by use of various tools and services, and provide group work.

You will be offered examples, guidelines and personal support. Through awareness-raising tasks, experimentation, reflection, and adaptation of guidelines you will create your own exercises and activities to use in your classroom.

Programme

Sunday 2.6.2024

Arrival to the hotel by 17.00. **18.00 Dinner at the hotel**

1st day: Monday 3.6.2024

09.00 Morning session: MHtE, ELS and QMS

Welcome. Introductions, needs and expectations.

- Welcome. MHtE. Plan for the week. ELS.
- MHtE: Each person tells 3 sentences, out of which one is wrong. Icebreaking. Around 25-30 people.
- 10.00 Coffee break 15 min
- The iQVet history. Standardization, Competence Units and the emerging Micro-Credentials approach. ELS
- Knowledge, Skills and the forgotten Competences form the perspective of the industry. QMS.
- *Hands-on training session:*
    - *How to structure a course into CUs?*
    - *What should a CU contain?*
    - *Presentation of the groupwork to the other participants*

12.00 – 14. 00 Lunch at the hotel

14.00 Afternoon session: MhtE

The application of work-based learning on the welding inspector course

- Principles of the work-based learning at welding inspector courses.
    - The overview of different novel educational methods used in the welding inspector industry. The results of a short survery on the preferred educational methods. The definition of work-based learning. Advantages of the application of WBL tools, from the side of VET schools and industrial stakeholders.
- Cases of innovative work-based learning of inspector welded products.
    - Showing real life case studies on how to apply digital educational materials supported with work-based learning real life examples, such as pipeline isometry of pressure vessels. Focusing on how can a teacher give lecture using digital materials and how can one implement real-life case studies into the education.
- Evaluation of micro-credentials of competence units of welding inspector knowledges.
    - The welding inspector course includes 10 competence units. During the course, the students go through each of the CUs with the teacher. Each of the CUs will be evaluates individually. If a student pass the required level, he get a micro-credential of the particular CU. The student can complete the course if all of the 10 micro-credentials are achieved.
- 15.00 Coffee break 15 min, discussion, questions.
- *Hands-on training session:*

o *Cases of methods and tools / how to be prepared a testing and inspection plan as a competence unit for an isometric pipeline and how to evaluate the result. How is it possible using the simulation and virtuality during inspector training. Defects and identification, comparison with testing and inspection results.*

o *The practice focuses on the Testing and Inspection competence unit. Each of the small groups (5 people) will get a real-life drawing of a pipeline, and with the help and lead of the tutor the teachers need to design the testing and inspection plan of that product. We will focus on that how to implement questions and comments and how to develop the educational material based on the case study.*

o *Presentation of the groupwork to the other participants*

18.00-22.00 Dinner at the hotel

2nd day: Tuesday 4.6.2024

09.00 MHtE: Study visit to industrial firm TLC KFT at Liter. The factory is very new and is producing agricultural machines. Web: www.tlckft.hu

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H-8196 Litér, Kenderesi u.1.
H-8230 Balatonfüred, Tihanyi műút 1.

Departure from hotel: 9.00 am
Arrival at Litér, TLC factory : 9.45 am
Start: 10.00
Check-out: 12.00 planned
Number: 25 people

Nationality: mixed - Hungarian, Slovenian, Swedish, Norwegian
Language of communication: english
Arrival on site: 1 large bus
Parking: at the front of the Social Building

Timetable:

1. Introduction of TLC Ltd
    a. venue: canteen of the Social Building
    b. the number is divided into 2 teams, of which
        i. one group: on a factory visit
            1. What are we showing? Robot, COBOT, CNC, Curve time monitoring system, etc.
        ii. the other group : attends a theoretical presentation
            1. location: office building meeting room
            2. Focus on innovative education !
            3. educational methods, process management working methods, digitalisation, **innovation**

Please note that photography is not allowed on the factory premises
Provision of protective equipment
SENNEBOGEN brochures (in English)

12.30 Arrival in Balatonfüred
12.30-14.30 Lunch in the Hatlépcsős Muskátli Wine Bar
14.30-16.00 Sightseeing, free program in Balatonfüred
16.00 Met in the harbour.
16.30 Boat departs to Siófok
17.20 Arrival to Siófok
17.45 Return to the hotel from the port by bus

18.00-22.00 Dinner at the hotel

3rd day: Wednesday 5.6.2024

09.00 Its` Learning webinar session: Use of LMS in "short" commercial courses applying CU. Person from Its Learning (Erik)

Brief summary of content:

- Brief history
- Building up structures, CUs for course catalogue
- Order CUs via course catalogue
- Enrolment of student
- Payment for courses

10.00 Coffee break 15 min.

10.15 Morning session: **Meldal**

Flipped work-based learning in CNC milling machine.

Part 1:

- Background for what we have done.
- Candidates qualifying prior knowledge.
- How does the candidate first become familiar with the content.
- Presentation of the course material on digital platforms (ItsLearning)

Part 2:

- Candidate familiarizes themselves with the equipment and the process.
- How does the candidate start with practical training?
- Hands on training: Practice tasks and tests on the digital learning platform (ItsLearning).

Part 3:

- Candidates' self-assessment.
- Instructors' assessment.
  - *Hands on training: Basic platform for further training.*
  - *Presentation of the groupwork to the other participants*

12-14.00 Lunch at the hotel.

14.00 Afternoon session: Weld on Sweden

Applying blended learning methods in the Design of welded steel products with Welding for designers, SK2-WfD.

- Historic (experience from R&D projects at industry + teaching from university and company internal courses, development of content and adoption of schedule for the need of industry)
- Examples of development of ordinary industry-adapted welding courses at university
- Why is this WfD training unique? (active and busy participants, direct communication, preparing before the course, adaption of course content and duration after the participants needs, …)
- 15.00 coffee break
- How we do it in Sweden (communication with customers, customization of course content, assessment of participants prior knowledge, preparation of participants before the course, …)
- Examples of standard and custom adapted WfD courses
- Show the video from a similar training course where the teachers explain the course content and its performance, also the participants talk about their expectation before the course and their recommendation at the end of the training.
- *Hands on session for participants:*
  - *How can you apply short time training in your country?*
  - *Presentation of the groupwork to the other participants*

18.00-22.00 Dinner at the hotel

4rth day: Thursday 6.6.2024

09.00 Study visit to university in* Veszprém*. They provide VET programs.

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Departure from hotel: 9.00 am
Arrival in Veszprém, university:10.00
Start: 10.00
Check-out: 12.00
Number: Planned 25 people

Programe:
10:00 - 10:15 - Reception of the delegation, presentation about the University of Pannonia and the Faculty of Engineering by Dr. Sándor Németh, Dean of the Faculty
Walk to a new location (5 minutes)

10:20 - 11:00 - The Human Aspect in Manufacturing - Presentation in the Industry 5.0 lab
Dr. Tamás Ruppert Associate Professor, Tran-Tuan Anh PhD student (the delegation will be divided into two groups)

Live demonstrations on the three pillars of the fifth industrial revolution: 1) Digital maintenance for sustainable manufacturing 2) Human-centric solutions for video-based human activity recognition, collaborative manufacturing processes and operator support systems 3) Resilience - how to use wearable sensors in an industrial environment - how to harness physiological measurements for operator resilience

11:00 - 11:30 - Laboratory demonstration in the workshop of the Department of Mechanical Engineering.
Ivett Simon, Departmental Engineer, Éva Kocsisné Pfeifer, Assistant Professor (the delegation will be divided into two groups)
Reverse engineering technology first phase: surface digitisation demonstration
Mechanical measurement solutions: surface roughness measurement, lever measuring system

11:30 - 12:00 - Laboratory demonstration in the workshop of the Department of Materials Engineering
Dr. Miklós Jakab Assistant Professor, Adrienn Fitosné Dr. Boros Assistant Professor (the delegation will be divided into two groups)
Demonstration of scanning electron microscopy, X-ray diffraction studies, material structure and composition studies

12:00 – 13.30 Lunch at the Uni-Café

14.00 Bus back to Siófok

15.00 Arrival at Siófok in to the hotel

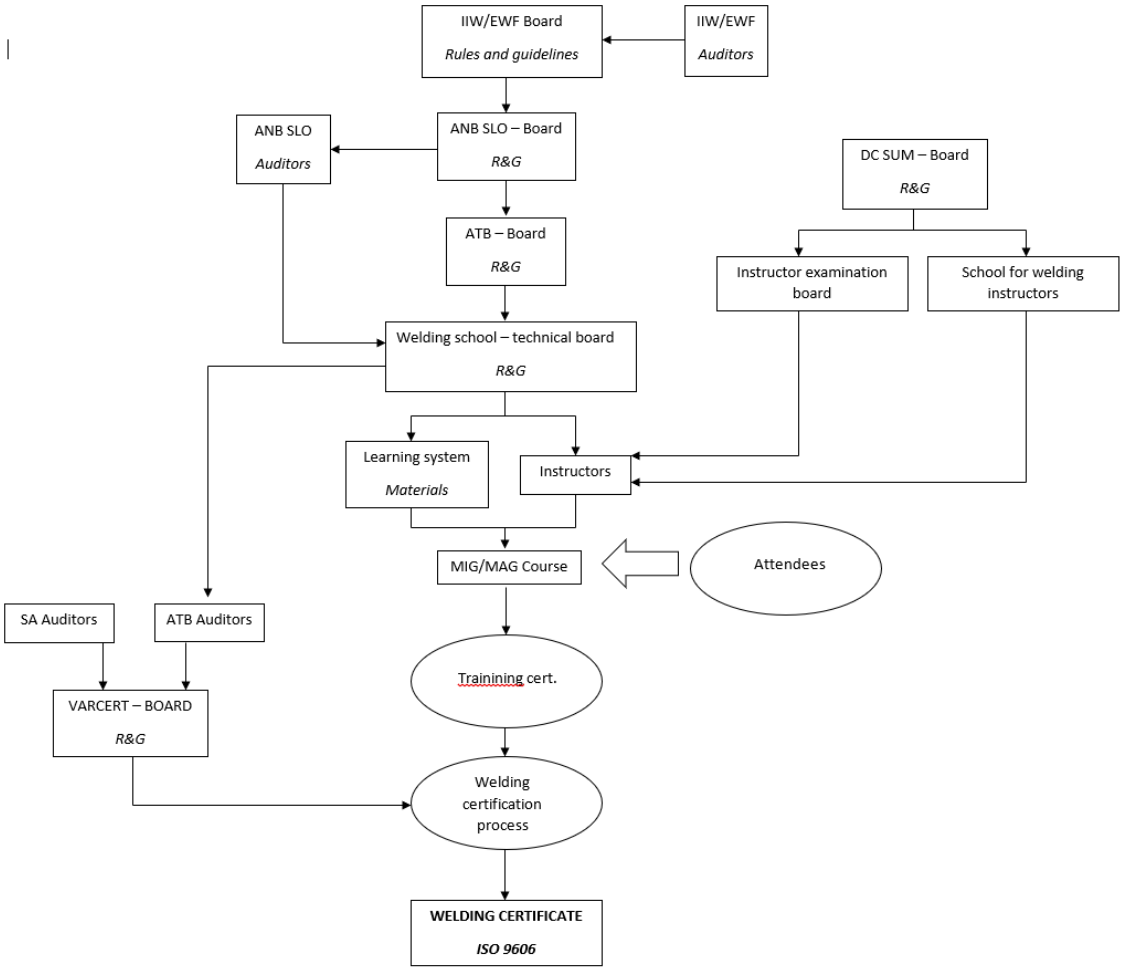
18.00-22.00 Gala dinner in the hotel with program

5th day: Friday 7.6.2024

The participants must check out from the hotel room around noon.

09.00 Morning session: Mig Mag Learning System, IzV

- Flow chart of the Mig Mag Learning System and documents



- Working procedure for the association of teachers/instructors
- Work procedure for maintenance and supervision of the association of teachers/instructors.
- 10.00 Coffee break
- Instructor Training Curriculum
- Workflow for teacher/instructor exams and certification and recertification
  - Exam questions
  - Certificates for theoretical knowledge
  - Certificates for practical knowledge
- Guidelines for a welding school.
- Work process in welding schools with new teaching methods included.
- Certification scheme for the introduction of a welding school
  - Example of a certificate
- The working process of the Mig Mag course

- Scheme for the Mig Mag course
- A manual for the theoretical basics of Mig Mag
- Presentation of Mig Maga distance learning system and LMS System Moodle
- Video of Zoom lessons
- Instructions for individual lessons with introduced modern teaching methods.
- Comparison of the status of lesson instructions before and after the IQVET project
- Presentation of the welding simulator with application options
- Presentation of the integration of work on the simulator into concrete lessons

12-14.00 Lunch at the hotel

14.00 Afternoon session: **Evaluation of the workshop. Distribution of certificates, farewell activities. MHtE/ELS/QMS**

15.00 Coffee break

16.00 Closure of the workshop.

Equipment: Please bring your own mobile devices like PC or tablets, or smartphones.

Language during the course: English

WHEN: 3/6/2024 --- 7/6/2024

Time schedule: The workshop contains 40 hours over 5 days. Morning session from 09.00 – 12.00, and afternoon session from 14.00 – 17.00. Lunch will be served from 12.00 – 14.00 and is an excellent location for networking. Dinner will be organized in the evening.

Travel: Participants could arrive to the hotel on Sunday at 17.00 or later.

WHAT MORE?

Outdoor activities included: We will visit two outdoor places in the area and villages around Lake Balaton.

HOW MUCH DOES IT COST? Travel and subsistence and the workshop will get financial support from the European Commission under the iQVet project of the Erasmus plus KA2 program.

WHERE DO I STAY? Accommodation and food are provided by the organizers MHtE. Accommodation (5 nights, in single or double room, arrival 2/6/24--- departure 7/6/24) and breakfast is organized in the **HOTEL RESIDENCE LAKE BALATON**, Hungary, and lunch --- dinner will be held inside the hotel or in different taverns of the villages.

WHO? The organiser is the MHtE, a leading institution specialised in organizing, delivering and certifying according to international guidelines, training of staff from industry all over Hungary. The workshop facilitators are project partners from different organisations around Europe: QMS and ELS (Norway), MHtE (Hungary), WoS (Sweden) and IzV (Slovenia).

PREPARATION & FOLLOW-UP?

Preparation

Before the workshop, you will receive information for the course group (trainers, organizers and organizing institutions, other participants). Organizers will beresponsible for sending all the necessary information regarding the venue and the trip. All the above will be

communicated via e-mail. You will be asked to describe your expectations from the workshop. It is also required to bring your own devices and present samples of possible projects you have done on applying blended learning systems in your own teaching and/or to share examples of interactive learning scenarios.

Follow-up

The participants will form a network which will function as a meeting point. Within this network, they will be able to exchange new experiences andproposals as well as useful ideas for promoting blended learning tools and ICT use for interactive learning in different contexts.