skillME...

NEWSLETTER No. 3

APRIL 2016

www.gzs.si/skill-me

Co-funded by the Erasmus+ Programme of the European Union

skillME

Skills in Metal and Electro Industry

skillME PROJECT

The **Skills in Metal and Electro Industry** or **skillME project** is a three-year collaborative project between vocational education and training (VET) providers, national regulatory partners and representatives of the metal and electro industries of the EU member states **Croatia**, **Latvia**, **Slovakia** and **Slovenia**, which aims at **identifying the most endemic skill gaps in the metal and electro industries** and **developing curricula to fill those gaps** that will be implemented into national VET systems.

The project lasts from **November 2014 until October 2017** and is **co-funded by the Erasmus+ Programme** of the European Union.

LATEST NEWS

Following the second project meeting in Riga, Latvia on 8 July 2015, skillME participants met for the third time at the **third project meeting** in **Zagreb, Croatia** on **8 and 9 December 2015**, which was attended by all project partners.

The meeting lasted for two days, during which partners discussed in detail the progress of the project, outlined the main achievements, potential issues and activities to be implemented in the next project phase.

Several aspects of project management, dissemination, quality assurance and project evaluation were discused. The main focus of the project, however, was to give an overview of the progress of **curricula design**. A representative of CPI Slovenia as the leader of Work package 3 – Designing of curriculums introduced the state of affairs and summarized the work completed within the work package, upon which the representatives of national teams presented the specific skill gaps curricula which they have been developing.

The presentations gave rise to a detailed discussion about the selected skill gap areas. It was agreed that the fields of presented skill gaps are quite wide, which is why it was necessary to narrow the fields by choosing one skill which will be most suitable for all participants. All partners agreed on the chosen skills and set a framework for further development of the curricula.

A representative of CPI Slovenia presented ongoing activities of Work package 3 – Designing of curriculums.

At the meeting, all partners signed an **Intellectual properties rights agreement**, aimed at regulating the use of the developed learning units and learning materials after the end of the project. It was agreed that the use, reproduction, distribution and public utilization for educational, teaching, training and research purposes will be free and free of charge for all third parties.

Partners also signed a **letter of intent** for the **creation of an Alliance for the advancement of VET in the electro and metal industry** upon the completion of the project. The aim of the Alliance will be to disseminate and exploit project results, create an action plan for the accreditation of created curricula in all four participating countries, and strengthen the cooperation and exchange of information on skill gaps and future labour needs among key national and transnational actors.

UPCOMING ACTIVITIES

The next project meeting will be held in **Bratislava, Slovakia** **on** **18 and 19 May 2016.**

PROJECT PROGRESS

1. In the first project phase, partners **analysed existing data** from previous skill gaps research findings in order to gain insight into the scope of the issue and form a starting point for further activities. The findings were further explored and upgraded with **focus group and interviews with metal and electro companies** from project countries. The results gave a clear picture as to the most sought-after competencies and the most endemic skill gaps in the metal and electro industry today.

2. Based on the analysis findings, **four most critical fields of skill gaps** among workers in the metal and electro industry were observed and narrowed down to prepare grounds for the creation of curricula in order to fill skill gaps in the following areas:

   1. **READING TECHNICAL DOCUMENTATION**
   2. **CAD/CAM SYSTEMS**
   3. **MACHINE VISION**
   4. **COMPOSITE MATERIALS**

3. In the third project phase, each national team of partners, consisting of a VET school, a regulatory partner and an industry representative, took over the design of **one curriculum** corresponding to the defined areas of skill gaps. The curricula design is complemented with the production of **learning materials**, consisting of a handbook for the presentation of theoretical knowledge for specific skills, theoretical and practical exercises for consolidating the acquired knowledge, and testing materials, all of which will be used by teachers in the implementation of the curricula. All curricula and learning materials will be adopted and localized into the languages of participating countries.

4. Once the curricula are completed, the project will enter into its testing phase. Partners will **implement pilot trainings** to evaluate the functionality and adequacy of the curricula in every project participating country.

CURRICULA DESIGN

The four curricula are being designed in line with **EQAVET**, **EQF** and **ECVET principles**, which endorse the learning outcomes approach and aim to serve as reference frameworks to increase the quality, flexibility, transparency, comprehensibility and currency of VET qualifications in Europe. SkillME project uses the learning outcomes approach and will design and create the **following four learning units and learning outcomes**:

1. READING TECHNICAL DOCUMENTATION

The purpose of this curriculum is to teach trainees how to identify a type of documentation and follow the rules of Technical Documentation Management (TDM); interpret the handout; determine machining and surface finish; and determine material, energy and time consumption.

2. CAD/CAM SYSTEMS

Upon completing this curriculum, trainees will be able to create a 3D model of a machine part using a CAD program; generate an NC code for positioning on the CNC machine; simulate processing and make corrections; generate technological documentation; and make a machine part on a CNC five-axis mill.

3. MACHINE VISION

The aim of this curriculum is to teach trainees how to explain the relationship and impact of parameters on the digital image; prepare imaging environment and set lighting; choose an optimum camera and lens; connect camera with a programmable logic controler and create inspection program; and measure and take a test on the operation of the machine.

4. COMPOSITE MATERIALS

The trainees will be able to understand the types and structure of the composites, specify composite materials according to their matrix and reinforcement component, compare composites with traditional materials; mark labels of composite materials acoording to EU/DIN/ISO and other countries' standards; choose composite materials and their processing way according to work task; choose processing tools using catalogs; and calculate processing parameters according to charasteristics of materials, processing and geometry of the tools.

For more information,
please visit www.gzs.si/skill-me.

PROJECT PARTNERS

Gospodarska zbornica Slovenije

Metal Processing Industry Association

National Centre for Education of the Republic of Latvia

Agencija za strukovno obrazovanje i obrazovanje odraslih

ZEPSR
Association of Electrotechnical Industry of the Slovak Republic

STROJARSKA TEHNIČKA ŠKOLA FAUSTA VRANČIĆA

CEA
Croatian Employers' Association

MASOC

ŠTOV

SOŠ STARÁ TURÁ

RTK
RĪGAS TEHNISKĀ KOLEDŽA

ŠOLSKI CENTER CELJE

CPI