



## SKILLCO NEWSLETTER

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### CONTENT in this/current issue:

- 1 **4 skills every construction worker/professional needs**
- 2 **Learning Units and Materials**
- 3 **The SKILLCO PILOTPHASE is in the starting blocks**
- 4 **5th SKILLCO partner meeting in Kerpen**
- 5 **Build your future! Hungarian national event**
- 6 **SKILLCO App slowly getting in shape**
- 7 **Partner CONTACTS**

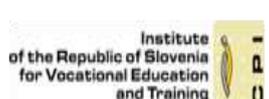
**COORDINATOR**



### WHAT IS SKILLCO?

SKILLCO is an innovative international project that addresses the construction industry's skill gaps. It is a three-year project involving VET providers, national regulatory partners and representatives of the construction sector (employers), both at EU and national level. The SKILLCO project is coordinated by the Chamber of Construction and Building Materials Industry of Slovenia (CCIS) and joins partners from Germany, Hungary, Slovenia and Belgium.

One of the first goals of the project was the identification of 4 industry-related skill gaps of construction workers, which we have accomplished through an extensive research. Based on the research carried out, training units and supporting learning materials (videos, pictures and graphic materials, manuals, quizzes, evaluation sheets, etc.) were prepared. Slovenian partners have already started (September 2018) testing the materials in the secondary vocational education programs and secondary professional education in the construction sector and among employers in the construction sector. Testing will be carried out in all partner countries.



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## **(1) 4 skills every construction worker/professional needs**

In the first year of the project, we completed a comprehensive study of sources and conducted a survey on missing skills in the construction sector. Among the construction workers, we identified four areas of key skill gaps: green skills, occupational safety and health, literacy and numeracy.

Many similar studies have already been done on this topic by CEDEFOP, OECD, EU Skills Panorama, etc., and also within different EU projects like for example BUS.TRAINERS (Building up green skills of trainers from the construction industry), BUS project Pillar 1 and 2 etc. Majority of studies that we have analyzed come to the same conclusion as we have in the SKILLCO research: The skills fields that are actual nowadays and which will continue to be very important in the future are green skills and occupational safety and health (OSH). Moreover, numeracy and literacy skills fields are also lacking among construction workers, since those are “focused in construction sector”.

Green skills »will be needed by in all sectors and at all levels in the workforce« and »the greening of the economy requires upgrading skills and adjusting qualification requirements« (CEDEFOP, 2012. Green Skills and environmental awareness in vocational education and training. Research paper n° 24. Publications Office of the European Union, 2012, Luxembourg). Effective and targeted training for teachers, mentors and trainers is a prerequisite for successful adoption and training of certain skills among employees and future employees. We are aware of this in the SKILLCO project, so the results of the project are regularly checked with external stakeholders, and in this way we take care of proper understanding of the content and quality of the final results: learning units, different learning materials, etc.

The construction sector is considered to be more demanding in the field of safety and health at work - OSH, which is why in the Skillco project we were looking for the OSH skills that could be more focused and improved in the project. The opinion of many employers is that, despite warnings, workers do not take into account security measures, nor are they aware that proper body movements can help prevent certain diseases associated with their work. In the work package 3, the School Center Celje prepared a manual "Prevention of musculoskeletal disorders among construction workers". Therefore, the manual describes the risks that may occur at construction sites and the risk assessment. In addition, it also contains the basics of the theory of ergonomics with the correct position of the body, the theory of musculoskeletal disorders. The last part of the manual offers 3 different types of exercises for preventing or reducing musculoskeletal disorders in the construction professions (before the beginning of work (heating exercise), during the work process (compensatory exercises), after the completion of the work (cooling exercise)).

In the Skillco project all the participating organizations claim that the field of occupational safety and health is very important and OSH is responsibility for both employers and employees. As the representative of EU industry employers, the FIEC project partner, attended the 9th Chinese Forum of Occupational Safety and Health from 15 to 17 October 2018. The event informed participants about



similar industry OSH problems and trends as reported by construction companies in Europe. FIEC performs at the EU level different OSH meetings and discussions. Within the annual activities of the FIEC Soc 2 work subcommittee, it addresses OSH topics and exchanges various OSH opinions, experiences, innovations, studies, results, problems. Similar topics are discussed regularly on EU level also at a joint session in the framework of social dialogue, between representatives of the EFBWW and FIEC trade unions and invited representatives of the European institutions. The SKILLCO theme has already been presented at these meetings, and participants in meetings (especially representatives of companies) do not hide interest in the final materials ready for use in everyday work.

## **(2) Learning Units and Materials**

In the last few months, various activities have been carried out related to the identified gaps, and we have designed learning units (part of the curriculum) for the latter:

**NUMERACY SKILL: Construction Cost Calculations for a New SKILLCO House**

**LITERACY SKILL: Construction Project Scheduling for a SKILLCO House**

**OSH SKILL: Prevention of Musculoskeletal Disorders for Construction Workers**

**GREEN SKILL: Reuse and Correct Handling of Construction Waste Material Built in a SKILLCO House**

Within the framework of the above mentioned gaps, the SKILLCO project developed learning units, which were prepared for inclusion in the VET curriculum. The teaching material was prepared on the basis of learning units, the latter drafting and linking 16 short films to SKILLCO as additional study material, which will also be included in the SKILLCO application:

[https://www.youtube.com/channel/UCe8vh6FvzsVlv\\_6p79EmHkw/videos](https://www.youtube.com/channel/UCe8vh6FvzsVlv_6p79EmHkw/videos) .

Additionally, handbooks were also made:

- A guidebook for construction calculations: Construction Cost Calculations for a New SKILLCO House
- A guidebook for OSH: Prevention of Musculoskeletal Disorders for Construction Workers
- A guidebook for Green skills: Reuse and Correct Handling of Construction Waste Material Built in a SKILLCO House
- A guidebook for the literacy gap: Construction Project Scheduling for a SKILLCO House.

All handbooks are available in English, Slovene, Hungarian and German.

Additional study materials such as quizzes, a library of graphic and graphic materials, tests of knowledge, 30 daily tasks for changing behaviour patterns in OSH (3 EXERCISES TYPES FOR EMPLOYEES) were prepared to be used in trainings in the classroom or in the companies.



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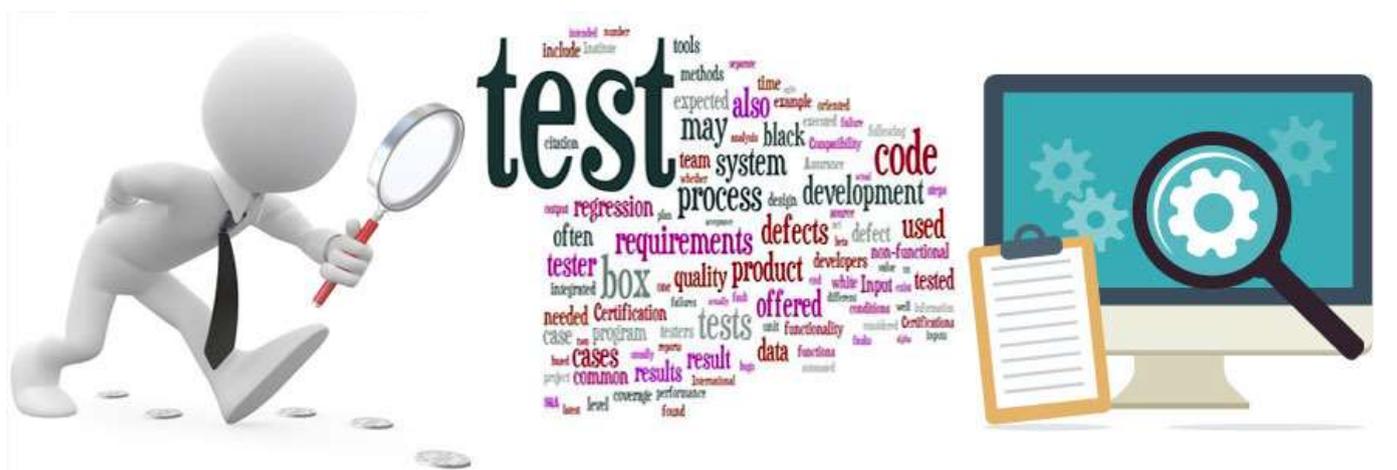
A construction plan for a single-family residential house was made in the 3D BIM architectural program ArchiCAD within the construction calculations guidebook. The plan will also be used in the literacy gap guidebook. A document containing all of the exercises from the guidebook was made regarding the occupational safety and health gap. The exercises will be included in the SKILLCO application. This way, students, construction workers and others will be able to access a web application which will show exercises in a random order. As additional materials for construction calculations, the Collection of Construction Standards, summarized from the 4BUILD software for calculation of simple residential facilities, was also made. All the study materials within the WP3 need to be perfected and checked for quality. After finishing the work on the WP3, the next step is enabling an active use of the newly created materials in the education of students and employees which starts in autumn 2018.

### **(3) The SKILLCO PILOTPHASE is in the starting blocks**

After the Berufsförderungswerk der Bauindustrie in Kerpen called on all partners to address relevant institutions, schools and companies and to encourage them to test and evaluate the learning materials developed within the framework of the project, the 5th Partner Meeting taking place on 17 and 18 October 2018 will be used to discuss all further steps of PILOTTING with the respective partners in SLO, HUN and DE.

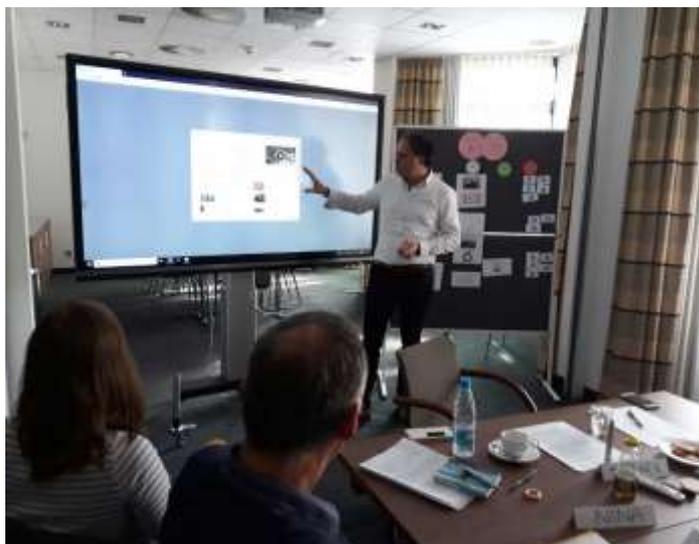
Partners from the countries of Slovenia, Germany and Hungary, who are active in pilot training, will, at this stage, develop the developed teaching materials and evaluate them with employees in construction companies, and with the students, teachers and mentors as well as external observers, they will make suggestions for improvement or correction of results, which we produced for missing skills.

Pilot training starts in October 2018 and ends in September 2019. When the testing and adaptation of all advanced teaching materials will be completed, the final integration into the Skillco application will be followed, scheduled for September 2019. The ROLL OUT will take place in October 2019 in Ljubljana.



#### (4) 5th SKILLCO partner meeting in Kerpen

From 17 to 18 October 2018 the fifth project partner meeting was held at the ABZ Kerpen, our host organization represented by project manager Björn Müller. During the meeting our new partners BKSZC from Hungary were introduced in the project and the planned outcomes. Major results of the meeting were the presentations of our upcoming pilot training, which will start soon at training centers in Germany, Hungary and Slovenia. During the pilot trainings we will test the handbooks and learning material that was produced during the first half of the project. The SKILLCO app was also baptized, its name is SkillgApp.



After the meeting, Björn Müller showed the consortium the different workshops of the training center.





## (5) „BUILD YOUR FUTURE!” – Hungarian national event

Péter Valló, the director of BKSZC (Budapesti Komplex Szakképzési Centrum) shared his ideas with us about the event:

“As you know the European Skill week- Euroskills is taking place for the third time at present. We wished to join it to promote the profession of construction workers. The event takes place in eight places at the same time (Budapest, Debrecen, Eger, Győr, Miskolc, Pécs, Szeged, Szombathely). The central location takes place at Pogány Frigyes Vocational School of BKSZC (1183 Budapest, Thököly utca 11.).

The official opening ceremony of the event was 6 Nov, 2018 at 10 am. The aim of the event was to gather together all the people who are interested in construction working field. To ensure the opportunity to observe among the several fields of professions, to show the latest tendencies and to meet different groups of interests.

We wanted to introduce the construction profession to students before career choice, To pretend a building of a house to highlight the needs of each and every part of the construction profession. Introducing materials which are used in basic construction and later trying interactively was also important. The visitors became familiar with computer based drawing and designing.

One of the most important issue was to let companies introduce themselves throughout the exhibition and give our students a clear view of the profession they will get in the future as qualified working forces. Giving place and time for discussions made ensure to inform the students about contracts.

Promoting our present competition SKILLCO was possible. Plenty of brochures and leaflets were printed and spread at the organization. Roll ups adverted the program. Péter Valló, director, highlighted the importance of the SKILLCO competition and special thanked for the representatives.





Budapest venue was special in the fact of announcing competitors and trainers of competing at Euroskills '2018 under the name of our school and professional center. The award ceremony was at 11 am after the opening ceremony. After closing the event we can happily sum that we achieved our aims.

The programs targeted two groups of students -primary and secondary school.

Nearly 1000 people visited the event. Mostly primary school students between 10 and 12 am. But high school students attended more in the afternoon.

The interactive exhibition, the possibility to touch and use and try all tools made really enjoyable memories for students.

With the contribution of the 20 exhibiting companies we organized a successful and memorable event. Schools, companies and students all left with grateful satisfaction.



## **(6) SKILLCO App slowly getting in shape: SkillgApp**

After some months of intensive development, the SKILLCO app for supporting students and teachers is slowly getting in shape. After common preparatory work concerning the conception and structure of the app, which was done together with the whole project consortium, the West German Chambers of Crafts and Skilled Trades' Council (WHKT) started development and already reached first milestones: a first testing and working version of the app including the planned structure is running and tested internally.



Bugfixes and the next steps are also parts of the work done by the working package leader. The internal testing phase of this early version is also part of the internal monitoring process, which makes sure that the whole consortium is participated in the development and the shape fits to the target groups' needs. "The final version of the app will include a module for teachers and one for students. We want to make



sure that the target groups will gain a modern possibility to learn the material we produce”, Philipp Dohmen, Working Package Leader of the WHKT, says.

Next steps of the app development are the programming of quizzes, implementation of further content and the provision of OER (open educational resources) features.

SkillgApp structure.



## SKILLCO in the Future

Forming of SSA "Alliance for advancement of VET in construction": By the end of the project SKILLCO (in 2019) we will create the non-formal form of future sectoral collaboration on EU level with developing SSA "Alliance founding document" in the construction (SSAC document).

ARE YOU INTERESTED TO JOIN US and FURTHER ADDRESS THE QUALIFICATIONS IN THE CONSTRUCTION SECTOR? CONTACT US AND AS A SUPPORT SIGN THE DOCUMENT!



## (7) Partner contacts:



Zbornica gradbeništva in  
industrije gradbenega materiala

Gospodarska zbornica  
Slovenije - GZS

Chamber of Commerce  
and Industry of Slovenia  
- CCIS

[www.gzs.si](http://www.gzs.si)



Šolski center Celje -  
SCC

School Centre Celje -  
SCC

[www.scc.si](http://www.scc.si)



Center RS za poklicno  
izobraževanje - CPI

The Slovenian Institute  
for Vocational  
Education and Training -  
IRSVET

[www.cpi.si](http://www.cpi.si)



Westdeutscher  
Handwerkskammertag  
- WHKT

West German Chambers  
of Crafts and Skilled  
Trades' Council - WHKT

[www.whkt.de](http://www.whkt.de)



Berufsförderungswerk  
der Bauindustrie  
NRW gGmbH – BFW  
NRW

The Training Institute of  
the Federation of  
Construction Industry  
NRW - BFW NRW

[www.abz-kerpen.de](http://www.abz-kerpen.de)



Építési Vállalkozók  
Országos  
Szakszövetsége -  
EVOSZ

The National Federation  
of Hungarian Building  
Contractors - EVOSZ

[www.evosz.hu](http://www.evosz.hu)



Budapesti Komplex  
Szakképzési Centrum-  
BKSZC

Budapesti Komplex  
Centre of Vocational  
Training - BKSZC

[www.bkszc.hu](http://www.bkszc.hu)



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FIEC aisbl

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To get notified on new information regarding SKILLCO project sign up for our newsletter at  
[www.skillco.eu/en/content/news](http://www.skillco.eu/en/content/news)