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WinAPP Newsletter

20th March 2017

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The Start of a New Project

WinAPP is abbreviation for **Work process oriented, interactively enhanced and APP supported learning and training in construction VET in Europe**. The project started in October 2016 and will end in September 2018.

Work process orientation VET

Work process orientation (WPO) is one of the key factors in construction VET, which among others decides upon the success of an individual in the labour market. The better entire (holistic) work processes are understood by skilled workers, the better worker and company fit together. The degree of work process orientation (or action orientation) as a pedagogic-didactic method in the initial vocational education and training (VET) on secondary level varies in a massive way in Europe.

What are the expected intellectual outputs and other benefits of the project?

Four intellectual outputs are expected:

- ⇒ a survey about work process orientation in Europe

- ⇒ APP content: development of digital media based work process orientation in VET
- ⇒ design and applying a testing structure
- ⇒ including activities which should lead to an effective feedback with target groups to have the best possible output at the end of the project.

Nevertheless, we expect some more general results, inter alia (among others):

- ⇒ extending the digital media competence of all involved VET centre partners
- ⇒ job enrichment for the involved staff (VET-trainers) of the project partners
- ⇒ increased management skills of the involved partners
- ⇒ increasing the attractiveness of the branch
- ⇒ increasing the attractiveness of VET-centres related to companies and apprentices.



Mrs Renata Cerneckiene introduced the Vilnius Builders Training Centre to the participants.

In Europe VET on Secondary Level Varies in a Massive Way

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FOR MORE INFORMATION

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Meetings in Vilnius and Madrid

The 1st International Meeting, Vilnius

The project Kick-off meeting was in November 2016 in Vilnius, Lithuania.

The system of work process orientation (WPO) in VET-training was explained. The poster explaining VET system in Germany with a systematic graphical overview was presented in detail since this is a main didactical input for the work in WinAPP. The model of the complete action is a teaching concept from occupational pedagogy. It should correspond to the practice in the professional life and enable the pupils to learn to act. The vocational pedagogues assume that the trainees, if they are taught according to this model, are able to transfer the acquired competency competences in their later professional life independently to other work processes. The model consists of six stages. It attaches great importance to the reflection of the processes, but is

more productively oriented than, for example, the discovery of learning. The model of the complete action is based on the action regulation theory developed by the working psychologists Winfried Hacker and Walter Volpert in the 1970s. The German model by Prof. Uhe & Meyser is still the method of choice in the VET of the construction sector in Germany.

The 2nd International Meeting, Madrid

The 2nd international project partners meeting was 28th of February to 1st of March 2017 in Madrid, Spain.

Mr Bertelmann-Angenendt from BZB introduced some basic examples for work process oriented tasks from the classical methods – on paper. Additionally, he showed some “accompanying formats”.



Mr Javier González López presented their organisation FLC (paritarian social fund type, established and managed by employers and employees).

Not least, a demonstration of sequences from the project FAINLAB was presented how interactive learning was looking like as computer based training in 2007.

He explained that BZB would also develop a draft for one common professions such as masons, which could stand for a methodologic base for other intellectual outputs in this project. The partners FLC, VSRC and CEAP will later decide who is taking over high, interior and road buildings tasks.

Why is the Project Planned Transnational?

As the labour markets in construction sector are not isolated and companies require flexibility, is necessarily that the project is planned transnational. For workers independent of their origin (also refugees) there should be an easy tool for devices they own in far majority (smartphones), to get familiar with the method and also with pilot contents.

To increase acceptance, the catalogue for self-contained tasks in this project will be defined by the project partners respecting the results of the interviews with VET-trainers/teachers and also apprentices in the very beginning phase of this project. The international gathering of content for

the APP as well as the promotion of a homogeneous approach for work process orientation throughout the partners countries (first steps) but also to third countries (second steps) should contribute to a European Labour Market in construction.

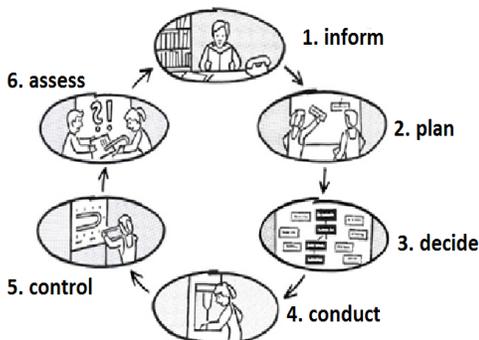
Countries involved in the project:

- ⇒ Germany
- ⇒ Italy
- ⇒ Lithuania
- ⇒ The Netherlands
- ⇒ Spain
- ⇒ Slovenia



In Europe VET on Secondary Level Varies in a Massive Way

The degree of work process orientation (or action orientation) as a pedagogic-didactic method in the initial vocational education and training (VET) on secondary level varies in a massive way in Europe. The scope varies from systems which base on conveying quite a high part of "only" theoretic knowledge and not highlighting the practical aspects, to systems with a big part of conveying practical knowledge and skills (work contract with a company before entering and while staying in VET). In some countries, the apprentices have a contract with a training centre and in others with a company in order to enter the VET-system in the construction sector. In the EU countries there are often systems of methodological steps in the work process orientation in VET. They range from rough three stages in countries (**1. plan**, **2. conduct** and **3. control**) to differentiated six steps in other countries (**1.inform**: What is to be done?; **2. plan**: How should the work order be operated?, What has to be considered?; **3. decide**: Which working path will be chosen?, Which tools/machines will be applied?; **4. conduct**: Execution of work; **5. control**: Has the work order been conducted completely and in a professional way?; and **6. assess**: What has to be improved for the future?).



The German model

The German model by Prof. Uhe & Meyser (*Handelnd Lernen in der Bauwirtschaft, Berlin, 2006*) is still the method of choice in the VET of the construction sector in Germany. It was developed among others by the promoter of WinAPP and is

distributed by Christiani-Verlag. This model is one of the most differentiated and the most work process oriented content conveying method in Europe. Additionally German **six-step work process-model** is also embedded in the German Dual System, which is widely demanded in other European countries to compete on the transnational labour market and providing their workforce with better chances to attract a company working contract and thus lower unemployment rates.

The new interactively form - APP will cope with the need for updating the form of media

Nevertheless, the system developed in 2006 is based on classical media: print and DVD. So far, there is nothing existing in form of APPs for this. The existing catalogue of single working tasks to be conducted in VET by apprentices and VET-trainers/teachers should be adapted to the state of the art for mobile devices - smartphones and tablets. The suitability of this tasks' catalogue is easy to explain, because there is always a self-contained task dedicated to the apprentice, starting with a customer's assignment. Then the apprentice has to inform him-/herself about possibilities how to start the job, plan the work steps, decide on material and methods, conduct the work, control the quality of work and eventually assess the whole process from the starting point.

This holistic methodologic approach gets even more important not only in Germany but beyond, because VET and any preparing measures for becoming construction worker is oriented towards working processes, assignment processes and business processes in the wider sense. A more intense awareness of these single steps helps apprentices at an early stage of their professional career to cope with the necessities of the future oriented method of Building Information Modelling (BIM), in

which all steps in the working process have to be documented etc.

The objective here is to analyse in detail the existing models and methods of work process orientation and the degree of application in VET in the partner countries by:

- ⇒ desk research and
- ⇒ interviews with VET-trainers or teachers and apprentices.

This should lead to a realistic approach:

- ⇒ How to cope with current requirements by the applying target groups,
- ⇒ How an APP should look like, what it should provide and which should be the core contents in terms of conveying method and practice.

The APP-development will incorporate versions for apprentices and VET-trainers/teachers. The new form (APP) will cope with the need for updating the form of media and thus the acceptance to work with the contents and methods. Eventually this should open new chances for young people to enter the labour market and lower youth unemployment rates.



APP will contribute to a greater apprentice's awareness about the individual steps

A more intense awareness of these single steps helps apprentices at an early stage of their professional career to cope with the necessities of the future oriented method of Building Information Modelling (BIM). The APP-development will incorporate versions for apprentices and VET-trainers/teachers.

1st Results of the Desk Analysis: VET Systems in Partner Countries

The first step of WinApp project, carried out in February 17, was dedicated to the draft of the desk analysis and the submission of an on-line survey in each partner country in order to analyse, in the different VET systems, to what extent work process oriented (WPO) method is applied and understood.

The desk analysis and surveys shows strong work based orientation in VET

The desk analysis, as well as the surveys, revealed that vocational training in all partner countries has a strong work-based orientation and therefore VET professionals and trainees are normally familiar with the concept of "learning by doing". However, learning by doing approach is mainly perceived as a training method that applies more practical training than theoretical lessons. The German model of WPO, worked out by Prof. Uhe & Meyser, which provides the application of the whole holistic work

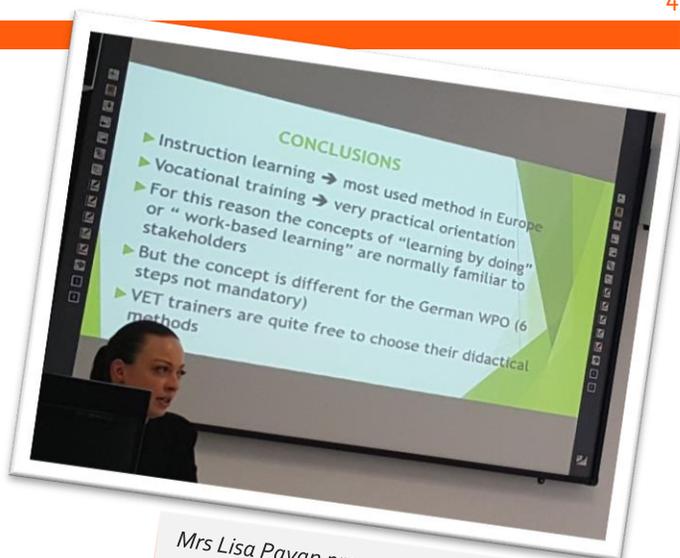
process, differentiated in six steps (1. inform, 2. plan, 3. decide, 4. conduct, 5. control and 6. assess) is, therefore, not a "must".

VET trainers are free to choose their didactical methods

The desk analyses brought also to light that for the most part, VET trainers are free to choose their didactical methods as long as they are in line with the Sectoral Qualifications Standards set at national (or regional) levels. Instruction learning can still be seen as the prevailing approach in European VET systems.

Trainers and trainees have a positive attitude towards learning by doing

The surveys' results show also that both trainers and trainees have a quite positive attitude towards learning by doing approach.



Mrs Lisa Pavan presented the conclusions of the desk analysis, at the 2nd International Meeting, Madrid in Madrid, Training Centre to the participants.

The total number of filled surveys was 211, out of which 159 filled by VET professionals at various level (teachers, trainers, VET staff, trainers' coordinators, mobility coordinators) and 52 by trainees (students and apprentices).



Photos from the Vilnius Builders Training Centre tour in November 2016.



Upcoming Events

Project envisions multiplier events which will be realised/organized by partners with national and international participants in the respective countries. All multiplier event are meant to be on the same day with common introductory videoconference speakers. Project videoconference (first part of multiplier event) could be joined also via the internet as web conference for interested distant participants from involved countries).

WinAPP multiplier events

WinAPP Dutch Project Info Day	26-06-2018
WinAPP Italian Project Info Day	26-06-2018
WinAPP Lithuanian Project Info Day	26-06-2018
WinAPP Spanish Project Info Day	26-06-2018
WinAPP Slovenian Project Info Day	26-06-2018
WinAPP German Project Info Day	21-09-2018

JUNE 2018						
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SEPTEMBER 2018						
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Project Partners



BZB

Bildungszentren des
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