



Multidisciplinary, Project-based Digital Learning Content for VET

PBL with interdisciplinary approach – blended course for VET teachers

In order for VET schools to meet the challenges of the 21st century, they need to establish close relationships with prospective employers and recognise the demands that the rapidly changing labour market places on young graduates.

In this phase of the project, teachers will be prepared for planning real-life projects together with industrial partners, developing and delivering micro-courses focusing on the knowledge and skills gaps the students need for successful implementation of the projects through a blended training course implemented in the partner countries.

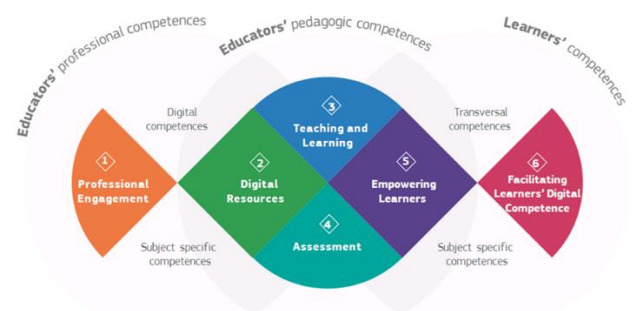
The aim of this working phase is to elaborate the resources (curriculum, e-learning environment, learning content and methodology) of the blended course for VET teachers in order to prepare them for applying a new model of teaching.

This training presents a method by which teachers of VET institutions will be able to reduce the "skill gaps" constantly indicated by the labour market by mobilising their own internal professional and pedagogical resources and creative energies. The training prepares participants to expand their own professional and digital portfolio with a special project method and to develop and deliver project-based micro-courses for their students for covering the gaps.

Curriculum

ITStudy, the leader of this WP prepared the curriculum for the course in English which the partner translated to Hungarian, Italian and German in what languages the online course will be delivered. The expected learning outcomes have been aligned with the European Qualification Framework (EQF) and the

Digital Competence Framework for Educators (DigCompEdu) developed by the EU.



The training is practice-oriented, the elements of project-based learning and the "responsive" project method will be tested by the participants in cooperation with their colleagues and with the representatives of local companies, by involving the students as well.

Methodology and Content

The course will be delivered in blended form and it will apply the methodologies suggested by the Digital Education Action Plan 2021-2027:

- *learning-by-doing;*
- *active learning;*
- *focused on the methods of digital education.*

Modules:

Module 1. **Project-Based Learning and Responsive Projects**

Module 2: **Innovative Assessment Practices for VET**
Module 3: **Digital tools in Project-based Learning (PBL) and in Responsive Projects (RP)**



Module 4: Planning and Developing Micro-courses



Online learning will be going on in the Moodle e-learning platform

Labour-market oriented projects for students

Meanwhile, VET teachers and companies of the related field to their subjects set out true-life projects to be performed by the students. In order to involve stakeholders, 3 multiplier events were held for them: 1 in Germany and 2 in Hungary, organized by DRDC and MAKESZISZ.



Multiplier event in Budapest by DRDC, 23/09/2022

All together 8 projects ideas have been developed by the partners in the 2 industrial fields to which the project focuses on:

- agriculture
- IT programming

Projects defined by JAC (Italy):

Green building

BIM modelling; integrated design; Environmental sustainability; Energy efficiency

Projects defined by MAKESZISZ (Hungary)

Meteorological data influence on plant growth

Collecting meteorological data and measuring soil temperature in school garden. Data processing, interpretation and conclusions. Get to know an ongoing technology with a partner company.

Precision agriculture with drone technologies

Become familiar with different soil practices and aerial imagery. Collecting and analyzing data at an existing farm.

Complete cultivation technology of a model plant

Overview a complete cultivation technology on one model culture. Increasing the efficiency of different work processes.

Projects defined by PREMO (Hungary)

Measuring and increasing website traffic

More effective marketing activity and customer identification by increasing website traffic.

Utilization of a spatial service management platform

Increasing the visibility of local businesses and local attractions, institutions and public services by more relevant reach of users.

Development of an application to help family businesses

Understand changes in technologies to improve efficiency in family businesses in viticulture, winemaking and catering.

Projects defined by DEULA (Germany)

Agriculture 4.0

Design of systems that interact with databases and their applications in management.

More information about the whole project is available on the [project website](#).

Project basics

Title: Multidisciplinary, Project-based Digital Learning Content for VET

Acronym: VETPROFIT

Project ID: 2021-1-HU01-KA220-VET-000025350

Partner countries: Germany, Italy, Hungary

Coordinator: iTStudy Hungary Ltd.

Duration: 01 November 2021 – 31 October 2024.

Target groups:

VET- schools' leadership

VET teachers/trainers

Companies (Agriculture and IT sectors)

Beneficiaries:

VET students

Employers

Aim of the project

The aim of the project is to reflect the needs of the labour market in vocational education and training, to prepare teachers to work with companies to develop project tasks for students and future employees to solve real problems proposed by them. To achieve this objective, the partnership:

Objectives

- *review the curriculum, learning materials and teaching methods used in the initial training of IT and Agricultural sectors in the partner countries;*
- *train VET teachers of these sectors about the project method, related digital tools, innovative assessment practices and digital content creation;*
- *assign real-life project tasks for VET students, in close collaboration of teachers and labor market representatives;*
- *create a repository of project-based, re-usable, high-quality, motivating digital learning contents with an interdisciplinary approach;*
- *prepare students for successful project implementation by designing and delivering mini-courses for them;*
- *create a model to be published as a guide for teachers of other VET institutes.*

Partners

iTStudy Hungary IT Education and Research Centre. Hungary

DEULA - Nienburg GmbH, Germany

Fondazione ITS – JobsAcademy, Italy

Association of Hungarian Horticultural Vocational Training Institutions, Hungary

Premontre Vocational High School, Technical School and College, Hungary

Discovery Center Nonprofit Ltd., Hungary