Project Based Learning and Responsive Projects

Upskilling Curriculum for Teachers

Multidisciplinary, Project-based Digital Learning Content for VET





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Basic figures

Course Title:	Draight Decod Leavning and Decomposity Draights
Course little:	Project Based Learning and Responsive Projects
Learning outcomes:	EQF Level 6
DigCompEdu:	Level B1-C2
Target group:	Teachers and trainers of Vocational Education
Form:	Blended learning

Rationale

Introduction

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 course the teachers will gain practical guide 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.

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 design

The expected learning outcomes will be 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. In line with the current labour market needs – they will plan and carry out their first" responsive" project.

Form and method

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.







Learning goals

At the end of the course the participants will be able to develop real-life **projects tasks** and related **interdisciplinary, project-based digital learning content** for the VET students in specific qualification that belong to Agriculture and forestry and/or IT and telecommunications sectors.

Modules

- Module 1. Project-Based Learning and Responsive Projects
- Module 2: Innovative assessment practices for VET
- Module 3. Digital tools in PBL and in RP
- Module 4: Planning and developing micro-courses

Assignments

Module	Assignments
Module 1. Project-Based Learning and	A1. Designing project-based learning
Responsive Projects	A2. Designing a responsive project in cooperation with
	labour market actors
Module 2: Innovative assessment	A3. Designing a learning outcomes-based assessment
methods	strategy
Module 3. Digital tools in PBL and in RP	A4. Using digital tools in project-based learning and
	responsive projects
Module 4: Planning, developing and	A5 Designing micro-courses and developing digital
running micro-courses	learning content

Module 1: Project-Based Learning and Responsive Projects

Aim of the module

The module aims to develop the knowledge, skills and competences needed to design, implement and evaluate project-based learning and responsive projects. The module is practice-oriented; a short theoretical introduction is followed by online collaboration, exchange of experiences and practical exercises between participants. On completion of the module, participants will be able:

- planning and running school projects by using PBL methods
- identifying the differences between PBL and RP methodologies
- selecting digital tools relevant for a more effective implementation of the projects
- applying methods consciously for developing soft skills and digital skills of their students

Topics

- 1. What is a project? Projects in business and in schools
- 2. Project-based Learning as a student-centred method
 - 2.1. Basic features advantages, difficulties





- 2.1.1. Pedagogical aims building knowledge, developing skills
- 2.1.2. The roles of the teacher in the learner-centred method
- 2.1.3. The features of the good project (examples)
- 2.1.4. How to start? Selecting a topic and asking questions
- 2.2. Planning, scheduling, and running the project
 - 2.2.1.Defining the scope (focus, topic, questions to answer, product to develop). Questioning techniques.
 - 2.2.2.Building teams, launching the project
 - 2.2.3. Monitoring projects along the PDCA (Plan-Do-Check-Act) cycle
 - 2.2.4.Closing the project, presentation of the results/products
 - 2.2.5.Innovative assessment methods in PBL

3. Responsive Projects (RP)

- 3.1. Aims of RPs and special features, similarities, and differences compared to PBL
- 3.2. Planning, scheduling, and running RPs
- 3.3. A storyboard for RPs

Knowledge, skills, responsibility and autonomy

European Qualification Framework 2017 The learning outcomes relevant to Level 6 are:				
Knowledge	Skills	Responsibility and autonomy		
advanced knowledge of a field of work or study, involving a critical understanding of theories and principles	manage complex technical or professional activities or projects, taking responsibility for decision- making in unpredictable work or study contexts take responsibility for managing professional development of individuals and groups			
At the end of the Module participants wi	ll be able to			
 describe the main features of PBL, design, run and monitor of PBL list and describe the assessment methods relevant to PBL explain the differences between PBL and RPs. explain how RPs can help to get closer the school to the industry identify differences in assessment methods in PBL and RPs 	 facilitate the students in selecting topics and asking research questions apply relevant digital tools at the right phase of the project plan his/her time-management during the project decide whether it is useful or unnecessary to use a digital tool in each project step 	 act as facilitator in PBL and in RP initiate collaboration with relevant stakeholders (other teachers, students, companies) assess pedagogical outcomes in a complex way (student progress, product, problem solvingetc.) 		



Module 2. Innovative assessment methods

The aim of the module

The aim of the module is to deepen the knowledge on different types and tools for assessment and to demonstrate, how the innovative assessment methods – as a part of the learning process – can promote motivation and can increase responsibility of students for their own learning.

By the end of the module, participants will be able to develop their own assessment strategy, to plan and develop, interactive, student-centred assessment supported by digital tools and to integrate it into the learning process.

Topics

- 1. Aim and types of pedagogical assessment
 - 1.1. From traditional assessment towards innovative methods
 - 1.2. The six components of the formative assessment¹
 - 1.3. Bloom's expanded model for formative assessment
- 2. Formative assessment in practice
 - 2.1. Connecting the assessment strategy with active learning methods
 - 2.2. Changing roles of teachers (less teaching, strategies to support learning)
 - 2.3. Examples, case studies, advantages, and difficulties
- 3. Digital tools for formative assessment
 - 3.1. The opportunities of applying technology in formative assessment
 - 3.2. Best practices and examples



¹ Assessment allows both instructor and student to monitor progress towards achieving learning objectives and can be approached in a variety of ways. **Formative assessment** refers to tools that identify misconceptions, struggles, and learning gaps along the way and assess how to close those gaps. It includes effective tools for helping to shape learning and can even bolster students' abilities to take ownership of their learning when they understand that the goal is to improve learning, not apply final marks (Trumbull and Lash, 2013). In contrast, **summative assessments** evaluate student learning, knowledge, proficiency, or success at the conclusion of an instructional period, like a unit, course, or program. **Summative assessments** are almost always formally graded and often heavily weighted (though they do not need to be). Summative assessment can be used to great effect in conjunction and alignment with formative assessment, and instructors can consider a variety of ways to combine these approaches.



Knowledge, skills and competences in Module 2

European Qualification Framework 2017 The learning outcomes relevant to Level 6 are:				
Knowledge	Skills	Responsibility and autonomy		
advanced knowledge of a field of work or study, involving a critical understanding of theories and principles	advanced skills, demonstrating mastery and innovation, required to solve complex and unpredictable problems in a specialised field of work or study	manage complex technical or professional activities or projects, taking responsibility for decision- making in unpredictable work or study contexts take responsibility for managing professional development of individuals and groups		
At the end of the Module participants wi	ll be able to			
 define the differences among the assessment methods explain the main components an conditions of formative assessmet Describe the new roles of teache formal assessment Explain the positive impact of for assessment on students' learning Present good examples and also challenges while applying FA 	 develop a strategy for integrating formal assessment into the learning process include students into the closing assessment of the project. Apply different assessment methods in the classroom Use digital tools for effective FA 	 use innovative assessment methods in the learning process and in the final (summative) assessment. use digital tools for assessment methods improve learning outcomes through innovative assessment methods. respond to the individual needs of learners through continuous observation and to solve unforeseen situations in the lesson. 		



Module 3: Digital tools in PBL and in RP

Aim of the module

The number of digital tools is growing exponentially every day, making it very difficult to choose the best tool for a given lesson or learning objective. The module will help teachers to use digital tools not for their own sake, but consciously to improve the effectiveness of teaching and learning. What is the "law of minimum" in applying digital tools? This module helps the effective use of digital tools in the stages of the project from planning to disseminating the results.

Topics

- 1. Effective use of technology for PBL opportunities and difficulties
- 2. How to select digital tools?
- 3. Connecting digital contents and tools to the project tasks
 - 3.1. Developing the project idea
 - 3.1.1.Brainstorming, online research
 - 3.1.2.Discussion, debate
 - 3.1.3.Concept map
 - 3.2. Developing the work plan, scheduling 3.2.1.Digital diary, timetable, Gantt-diagram 3.2.2.Individual learning diary
 - 3.3. Project monitoring, online collaboration support
 - 3.3.1. Joint content development, sharing
 - 3.3.2. Video conferencing
 - 3.3.3. Simple project management platforms
 - 3.4. Motivational digital tools for practicing 3.4.1. Games, Rubrics, Quizzes, Checklist
 - 3.5. Presenting the results, creating digital reports
 3.5.1.Building e-portfolios
 3.5.2.Creating, editing presentations, videos
 3.5.3.Applying Infographics

The applications that the participants will learn to use:

Developing project idea	Developing work plan, scheduling	Supporting online collaboration	Self-evaluation, feedbacks	Presenting the results
Bubbl.us	Trello	GoogleDrive	Padlet	Canva, Genially
Mindmeister	Ganttproject	Flipgrid	GoogleForms	Blogger
Miro	Lino	Zoom, Teams	Kahoot	Spotify
Mentimeter	Meistertask	VoiceThread	LearningApps	Slideshare, Sway
Wordart	Excel	Slack	Microsoft 365/Teams and Power Apps	Venngage
Linoit		Canva, BookCreator	Socrative	Animoto, Bitable





Developing project	Developing work	Supporting online collaboration	Self-evaluation,	Presenting the
idea	plan, scheduling		feedbacks	results
AhaSlides, Slido		Canva	AhaSlide, Slido	AhaSlide, Slido

Knowledge, skills, responsibility and autonomy in Module 3

European Qualification Framework 2017 The learning outcomes relevant to Level 6 are:				
Knowledge	Skills	Responsibility and autonomy		
advanced knowledge of a field of work or study, involving a critical understanding of theories and principles	advanced skills, demonstrating mastery and innovation, required to solve complex and unpredictable problems in a specialised field of work or study	manage complex technical or professional activities or projects, taking responsibility for decision- making in unpredictable work or study contexts take responsibility for managing professional development of individuals and groups		
At the end of the Module participants wi	ll be able to			
 select digital tools for planning projects select digital tools for running projects select digital tools for evaluating projects select digital tools for presenting project results describe the advantages and difficulties of using technology in projects define the conditions for applying a digital tool for project work 	 create online concept map and drive online collaboration with visual tools like Miro collaborate online by using digital tools create and share attractive presentation and videos create online quizzes for practicing use video-conferencing system 	 solve unpredictable technical problems during the project work develop the digital skills of students through online collaboration involve students into the digital content creation 		



Module 4: Planning, developing and running micro-courses

Aim of the module

In response to the needs of the economy and to the rapid changes in technology, vocational education and training is being asked to offer more flexible learning pathways and short micro-courses, in addition to traditional standard curricula and training programmes. Micro-courses offer learners a short, intensive learning pathway to acquire knowledge and skills that are required by the labour market but that are not or that are only partially covered by the curriculum. At the end of the module, participants will be able to design a learning outcome-oriented micro-course for their own vocational subject, as well as to create and to share the digital learning environment and the necessary digital learning materials to deliver the course.

Topics

- 1. The concepts of micro-course and micro-certificate
- 2. Learning outcomes-oriented course design
 - 2.1 Learning outcomes-based design by Knowledge, skills, responsibility and autonomy
 - 2.2 Using the EU educational frameworks (EQF, DigComp) in course design
 - 2.3 Designing interactivity
 - 2.4 Design of tasks and assessment methods
- 3. Developing digital micro-learning contents in collaboration
 - 3.1 Designing the mode of learning (self-learning, online learning, contact learning and determining the proportions of different modes)
 - 3.2 Selection of digital tools for content development
 - 3.3 Designing digital microlearning materials in line with the intended learning outcomes (videos, tests, games, simulations, podcasts).
 - 3.4 Incorporating free learning resources into the micro-course
- 4. Designing an online learning environment for the micro-course
 - 4.1 Preparing the course scenario, preparation of a learning guide
 - 4.2 Selecting the learning environment
 - 4.3 Planning communication, collaboration, and evaluation





Knowledge, skills, responsibility, and autonomy in Module 4

European Qualification Framework 2017 The learning outcomes relevant to Level 6 are:					
Knowledge	Skills	Responsibility and autonomy			
advanced knowledge of a field of work or study, involving a critical understanding of theories and principles	advanced skills, demonstrating mastery and innovation, required to solve complex and unpredictable problems in a specialised field of work or study	manage complex technical or professional activities or projects, taking responsibility for decision- making in unpredictable work or study contexts take responsibility for managing professional development of individuals and groups			
At the end of the Module participants wi	At the end of the Module participants will be able				
 identify the mismatch between the curriculum and labour market requirements in their field of specialisation, identify the learning needs of students, explain the concepts of micro-course and micro learning content, explain the concept of the learning-outcome oriented course design, present the applications needed to implement an online learning environment. 	 develop a detailed micro- course plan based on learning outcomes and students' learning needs, create and share micro- learning contents in a variety of digital formats, design and implement an online learning environment. 	 develop their pedagogical methods to meet 21st century requirements, improve their own pedagogical work through self-reflection, initiate and manage collaborative learning in online environment. 			





Digital competences of teachers after completing the course based on the DigCompEdu framework

Competence	Minimum levels
1. Professional engagement	
1.1. Organisational communication	B2 Using digital technologies for communication in a structured and responsive way.
1.2. Professional collaboration	B2 Using digital technologies for collaborative knowledge construction.
1.3. Reflective practice	B2 Using a range of resources to develop one's individual digital and pedagogic practices.
1.4. Digital CPD (Continuous Professional	C1 Critically and strategically using the internet for CPD.
Development	
2. Digital resources	
2.1 Selecting digital resources	B1 Identifying and assessing suitable resources using basic criteria.
2.2 Creating & modifying, digital resources	C1 Creating, co-creating and modifying resources according to the learning context, using a range of advanced strategies.
2.3 Managing, protecting & sharing digital resources	C1 Digitally publishing self-created resources.
3. Teaching and learning	
3.1. Teaching,	C1 Orchestrating, monitoring and flexibly adapting the use of digital technologies to
	enhance pedagogic strategies.
3.2. Guidance	C1 Employing digital technologies strategically and purposefully to provide guidance and
	support.
3.3. Collaborative learning	C1 Using digital environments for learners' collaborative knowledge generation and peer assessment.
3.4 Self-Regulated Learning	B2 Using digital environments to comprehensively support self-regulated learning.
4. Assessment	
4.1 Assessment strategies	C2 Developing innovative assessment formats, using digital technologies.
4.2 Analysing evidence	C1 Using digital data to reflect on learning patterns and teaching strategies.
4.3. Feedback and planning	C1 Using digital technologies to personalise feedback and support.
5. Empowering learners	
5.1 Accessibility & inclusion	B1 Addressing accessibility and inclusion.
5.2 Differentiation & personalization	B2 Comprehensively and critically implementing differentiated and personalised
	learning.
5.3 Actively engaging learners	C1 Comprehensively and critically implementing strategies for active learning.



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Competence	Minimum levels
6. Facilitating learners' digital competences	
6.1 Information & media literacy	B2 Strategically using a range of pedagogic strategies to foster learners' information and media literacy.
6.2. Digital communication & collaboration	B2 Strategically using a range of pedagogic strategies to foster learners' digital communication and collaboration.
6.3. Digital content creation	C2 Using innovative formats for fostering digital content creation by learners.
6.4 Responsible use	B2 Pedagogically supporting learners' use of digital technologies to ensure their wellbeing.
6.5 Problem solving	B2 Strategically using a range of pedagogic strategies to foster learners' digital problem solving.



Annex 1: Projects in Vocational Education

At present there are three basically different approaches applied to managing projects in schools:

- 1. one is the implementation of a complex pedagogical project in intensive collaboration with students and teachers, i.e. Project Based Learning (PBL). This is about developing complex projects with clear learning goals and didactic aims as defined by the standard curriculum.
- 2. the other project-based method involves handing out <u>project tasks</u> to students for practice and for assessment of the learning outcomes at the end of a particular learning phase.
- 3. The third ones are the responsive projects implemented in a collaboration of teachers, students and companies.

What	Project task	Project-based learning (PBL)	Responsive projects (RP)
Who will define the project?	The task is defined by the teacher; the students have no opportunity to change it.	Students receive pre- approved guidelines and have the freedom to make choices in defining their own project, but usually starting with specific, focusing questions based on the content they need to learn.	A real-life project task is defined by a company based on their ongoing business tasks.
Working form	Students can work on the project at home, <u>without guidance from</u> <u>the teacher</u> . The teacher's work is focused on evaluation after the completion of the project.	Teachers provide significant input in the planning phase, but the main work of the project is based on the collaboration with students.	Teachers identify the missing knowledge and skills and develop a micro-course and deliver it before the project starts.
Focus and complexity	The focus is usually on a simple project, after the end of a learning phase. It is not necessarily related to the learning process. It is seen as a closing <u>action - like a 'dessert' after the</u> <u>main course</u> .	It may be highly <u>complex</u> , but strongly related to the standard curriculum, as it plays a crucial role (<u>like the</u> <u>'main course'</u>) in the learning process. However, it is unique and needs time and collaboration.	It is not strictly connected to the standard curriculum, the knowledge and skills can exceed the requirements of it.
Type of the project task	The project task <u>is not necessarily</u> <u>about a real-world problem</u> , and it may be the same from year to year. It also may be the same for every student.	The project <u>is strongly related</u> <u>to a real-world problem</u> , and it has to be relevant to students' lives or future lives, and connected to their former experiences	The project is strongly related to a real-world problem of the company involved in the collaboration.
Guidance	There are often no strict guidelines about how and when to do the project task.	The project is <u>carefully</u> <u>scheduled</u> , follows a project plan and is delivered as the collaborative work of students and teachers.	The implementation needs very detailed planning and should be based on a "contract" between the school and the company. The teacher act as facilitator.





Assessment	The project task is submitted according to rules as defined by the teacher. <u>The project task is assessed only</u> <u>by the teacher</u> . <u>S</u> tudents have little information about the evaluation process and the grades of other students.	The final results are often presented to a public audience including invited external guests. The assessment of the project and the work of the team members follow an open and accepted rubric.	It includes a complex assessment strategy which can include a wide variety of methods, like self-evaluation, peer assessment and also portfolio assessment. <u>In the final evaluation the company has a crucial</u> role.

Annex 2 DigCompEdu Competence Framework



DigCompEdu proficiency levels

Source: EU Science Hub, <u>https://joint-research-centre.ec.europa.eu/digcompedu/digcompedu-framework/digcompedu-proficiency-levels_en</u>



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DigCompEdu distinguishes six stages or levels along which educators' digital competence typically develops. For each stage a role descriptor is provided which reflects the particular focus of digital technology use typical for the competence stage. These role descriptors also relate to an educator's relative strengths and roles within a professional community.

Newcomer (A1)

Newcomers are aware of the potential of digital technologies for enhancing pedagogical and professional practice. However, they have had very little contact with digital technologies and use them mainly for lesson preparation, administration or organisational communication. Newcomers need guidance and encouragement to expand their repertoire and to apply their existing digital competence in the pedagogical realm.

Explorer (A2)

Explorers are aware of the potential of digital technologies and are interested in exploring them to enhance pedagogical and professional practice. They have started using digital technologies in some areas of digital competence, without, however, following a comprehensive or consistent approach. Explorers need encouragement, insight and inspiration, e.g. through the example and guidance of colleagues, embedded in a collaborative exchange of practices.

Integrator (B1)

Integrators experiment with digital technologies in a variety of contexts and for a range of purposes, integrating them into many of their practices. They creatively use them to enhance diverse aspects of their professional engagement. They are eager to expand their repertoire of practices. They are, however, still working on understanding which tools work best in which situations and on fitting digital technologies to pedagogic strategies and methods. Integrators just need some more time for experimentation and reflection, complemented by collaborative encouragement and knowledge exchange to become *Experts*.

Expert (B2)

Experts use a range of digital technologies confidently, creatively and critically to enhance their professional activities. They purposefully select digital technologies for particular situations, and try to understand the benefits and drawbacks of different digital strategies. They are curious and open to new ideas, knowing that there are many things they have not tried out yet. They use experimentation as a means of expanding, structuring and consolidating their repertoire of strategies. Experts are the backbone of any educational organisation when it comes to innovating practice.

Leader (C1)

Leaders have a consistent and comprehensive approach to using digital technologies to enhance pedagogic and professional practices. They rely on a broad repertoire of digital strategies from which they know how to choose the most appropriate for any given situation. They continuously reflect on





and further develop their practices. Exchanging with peers, they keep updated on new developments and ideas. They are a source of inspiration for others, to whom they pass on their expertise.

Pioneer (C2)

Pioneers question the adequacy of contemporary digital and pedagogical practices, of which they themselves are *Leaders*. They are concerned about the constraints or drawbacks of these practices and driven by the impulse to innovate education even further. Pioneers experiment with highly innovative and complex digital technologies and/or develop novel pedagogical approaches. Pioneers are a unique and rare species. They lead innovation and are a role model for younger teachers.

For each of the 22 competences, level descriptors and proficiency statements are provided that allow educators to understand their level of competence and their specific development needs.





Annex 3 - Bibliography

Bloom, B. et al.(1971) Handbook on Formative and Summative Evaluation of Studnet Learningm McGraw-Hill Book Co., New York

Prievara, T.(2015): A 21. századi tanár, Egy pedagógiai szemléletváltás személyes története, Neteducatio Kft., Budapest

Knausz, I.e (2005): A tanulók értékelése. In Intézményvezetés és közoktatási értékelés. Okker, Budapest

Palencsárné, K. M. et al (2022): Gyakorlat teszi a mestert – a projektoktatás kézikönyve, Tempus Közalapítvány, Budapest

Vass V. (2017): Kompetenciafejlesztés a 21. Században (értékteremtés és megújulás), Selye János Egyetem, Komárom

COUNCILCOUNCIL RECOMMENDATION of 22 May 2017on the European Qualifications Framework for lifelong learning and repealing the recommendation of the European Parliament and of the Council of 23 April 2008 on the establishment of the European Qualifications Framework for lifelong learning (2017/C 189/03)

Redecker, C. (2017): European Framework for the Digital Competence of Educators: DigCompEdu. Punie, Y. (ed). EUR 28775 EN. Publications Office of the European Union, Luxembourg, 2017, ISBN 978-92-79-73494-6, doi:10.2760/159770, JRC107466





Annex 4: European Qualifications Framework

For the purposes of the recommendation, the following definitions apply

'qualification' means a formal outcome of an assessment and validation process which is obtained when a competent authority determines that an individual has achieved learning outcomes to given standards;

'national qualifications system' means all aspects of a Member State's activity related to the recognition of learning and other mechanisms that link education and training to the labour market and civil society. That includes the development and implementation of institutional arrangements and processes relating to quality assurance, assessment and the award of qualifications. A national qualifications system may be composed of several subsystems and may include a national qualifications framework;

'national qualifications framework' means an instrument for the classification of qualifications according to a set of criteria for specified levels of learning achieved, which aims at integrating and coordinating national qualifications subsystems and improve the transparency, access, progression and quality of qualifications in relation to the labour market and civil society;

'international qualification' means a qualification awarded by a legally established international body (association, organisation, sector or company) or by a national body acting on behalf of an international body that is used in more than one country and that includes learning outcomes assessed with reference to standards established by an international body;

'*learning outcomes*' means statements regarding what a learner knows, understands and is able to do on completion of a learning process, which are defined in terms of knowledge, skills and responsibility and autonomy;

'knowledge' means the outcome of the assimilation of information through learning. Knowledge is the body of facts, principles, theories and practices that is related to a field of work or study. In the context of the EQF, knowledge is described as theoretical and/or factual;

'skills' means the ability to apply knowledge and use know-how to complete tasks and solve problems. In the context of the EQF, skills are described as cognitive (involving the use of logical, intuitive and creative thinking) or practical (involving manual dexterity and the use of methods, materials, tools and instruments);

'responsibility and autonomy' means the ability of the learner to apply knowledge and skills autonomously and with responsibility;

'competence' means the proven ability to use knowledge, skills and personal, social and/or methodological abilities, in work or study situations and in professional and personal development;

'validation of non-formal and informal learning' means the process of confirmation by a competent authority that an individual has acquired learning outcomes acquired in non-formal and informal learning settings measured against a relevant standard and consists of the following four distinct phases: identification through dialogue of particular experiences of an individual, documentation to make visible the individual's experiences, a formal assessment of those experiences and certification of the results of the assessment which may lead to a partial or full qualification;

'formal recognition of learning outcomes' means the process of granting official status by a competent authority to acquired learning outcomes for purposes of further studies or employment, through (i) the award of qualifications (certificates, diploma or titles); (ii) the validation of non-formal and informal learning; (iii) the grant of equivalence, credit or waivers;

'credit' means confirmation that a part of a qualification, consisting of a coherent set of learning outcomes has been assessed and validated by a competent authority, according to an agreed standard; credit is awarded by competent





authorities when the individual has achieved the defined learning outcomes, evidenced by appropriate assessments and can be expressed in a quantitative value (e.g. credits or credit points) demonstrating the estimated workload an individual typically needs for achieving related learning outcomes;

'credit systems' means a transparency tool for facilitating the recognition of credit(s). These systems can comprise, inter alia, equivalences, exemptions, units/modules that can be accumulated and transferred, the autonomy of providers who can individualise pathways, and the validation of non-formal and informal learning;

'credit transfer' means the process of allowing individuals who have accumulated credit in one context to have it valued and recognised in another context.





Multidisciplinary, Project-based Digital Learning Content for VET

BASIC DATA

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. BACKGROUND

Vocational education and training (VET) has a key role to play in preparing young professionals for the challenges of a rapidly evolving global and digital economy. However, education often operates in isolation from the business world, with a widening gap between the skills provided by schools and those required by employers.

The labour market needs practical knowledge, and textbooks tend to be dominated by theory. Textbooks are not motivating enough for students born into the digital world and contain very few real-life examples from work situations. While most workplaces expect staff to work in a project-oriented way, the project approach and its associated forms of work are still not integrated into training, and a significant number of trainers are not yet prepared to apply the project approach. The multidisciplinary approach is difficult to integrate with traditional teaching methods, even though young graduates need to apply knowledge and skills from different subjects at the same time to solve workplace problems. While employers expect prospective employees to work in teams and on projects, the project method and related forms of work are not widespread in VET and project-based teaching methods are often missing from the toolbox of VET teachers.

Target groups

- VET- schools' leadership
- VET teachers/trainers
- Companies (Agriculture and IT sectors)

Beneficiaries

- VET students
- Employers

OBJECTIVES

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:

• 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 minicourses for them;
- create a model to be published as a guide for teachers in other VET institutes.

RESULTS



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



