

Continuing professional development in digital education for VET



Module 1: Competences of the VET Teacher Unit 1.1: Understanding Competence and Digital Competences



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Digital Training Delivery in Vocational Education and Training.

Entire training program is available at: <https://www.covet-project.eu/>

Module 1: Competences of the VET Teacher

Unit 1.1: Understanding Competence and Digital Competences



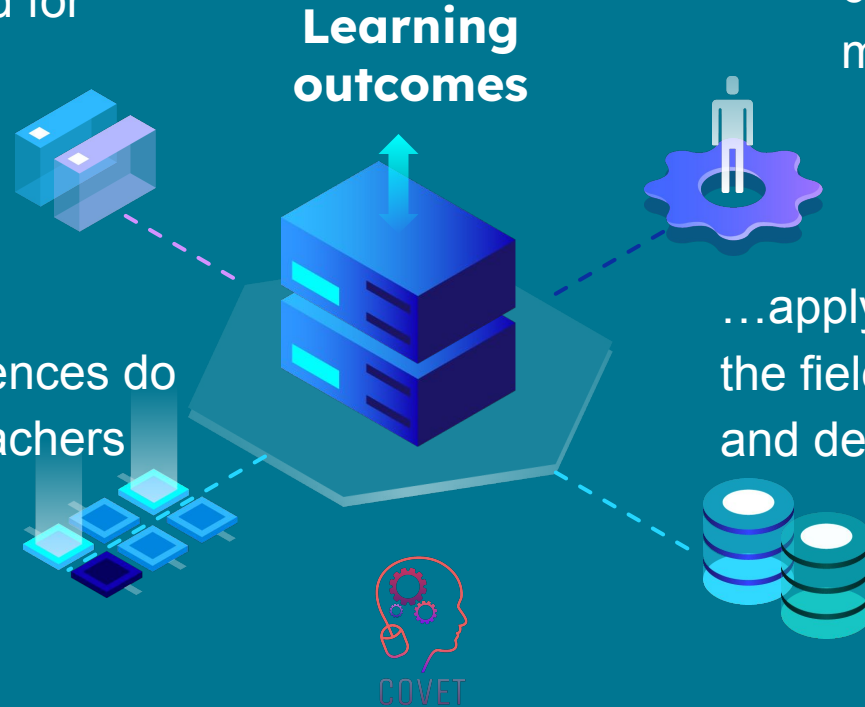
At the end of this Unit you will be able to:

... understand the meaning of competency in and for VETs.

...use the concept of competency in a true manner.

...know what competences do modern vocational teachers need.

...apply the competencies in to the field to effectively prepare and develop VET teachers.





The second part represents a delving into the issue that collects suggestions, ideas, and more details to explore.



The third part is a collection of videos, testimonials, written documents, cartoons, etc. to explore the focused issue surfing the Internet.

Each Unit is composed of 4 parts



The first part lets you to focus on the issue by an analysis of the Unit key words and by an expositive short text.



The fourth part is a testing section through which you can test yourself and reflect on what you learnt.

Content of the Unit

- Introduction
- The need for skilled teachers in VET
- The meaning of competency and competence
- Different definitions of competency
- Digital Competencies

Introduction

The acceleration of globalization, the increase in the use of communication technologies and the production of information, the realization and maintenance of development depending on the global economy in the twenty-first century, increasing the level of welfare, the necessity for highlighting cultural values require having a manpower equipped with new knowledge and skills, self-confident and respectful to different cultures.

Individuals with these characteristics are only possible through education systems. In today's information societies, it is necessary to use all kinds of tools that will provide access to information in the teaching environment and realize the use, production and dissemination of information.

It is essential to raise individuals of the new century, equipped with different skills, who will provide these competencies. Therefore, it is very important to focus on teachers, especially in vocational education and training.

Why we need skilled teachers in VET ?

VET should be delivered by highly qualified teachers and experienced trainers who are supported through initial and continuing professional development (including digital skills and innovative teaching methods) in view of delivering high quality learning outcomes.

Efforts should be targeted at increasing the attractiveness of teachers and trainers' professions to ensure a sufficient number of qualified teachers and trainers.

Today, educational activities of teachers exceed the implementation of syllabi and acquire features of educational multi-functionality.

It covers several competences such as the participation in the realization of strategic objectives in education; the ability to update the content of professional education; the establishment of inter-sectoral communication; the management of educational projects; the development of integrated models for professional training based on a combination of traditional methods and modern pedagogical technologies in the educational process.

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VET systems need to be better adaptable to the rapidly evolving socio-economic environment, more demand-driven and open in terms of forms of provision, notably through internationalization strategies, more transnational mobility experience, new forms of digital learning, blended learning, modules for re- an up-skilling that are offered and diversity of providers.

Opinion of the Advisory Committee on Vocational Training, 2018



Teachers are central to vocational education and training (VET). Often referred to as a “dual profession”, VET teachers require both pedagogical and industry knowledge to prepare young people and adults for the labour market.

As institutional leaders in VET, they play many important roles, from developing and supporting students to engaging multiple stakeholders and improving the quality of VET through the allocation of resources and provision of instructional guidance.



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The Meaning of Competency and Competence



The European Reference Framework of Key Competences for Lifelong Learning (European Union, 2007) described “competence” as the required knowledge but also skills, attitudes and the ability to apply learning outcomes as is appropriate to the context (e.g., working life) (Cedefop, 2014).

The concept of competence is separated, by paradigmatic difference, from the concept of competency, while competency refers to the potential of an individual as a whole (Mäkinen & Annala, 2010).

The main difference between competence and competency is that the former is based on the skill while the latter refers to the behavior of an individual. The two words also differ in the ways to attain them, their means of assessment, their components, etc.

Competence focuses on skill sets, including leadership, time management, communication, and interpersonal skills, etc.

Competency has its focus slightly tilted towards the behavioral qualities of an individual, for instance, honesty, integrity, discipline, so on and so forth.

Comparison of competency and competence



Parameters of Comparison	Competence	Competency
Definition	It refers to the capability of an individual to carry out a particular task.	It focuses on the performance that an individual showcases in having completed a particular task.
Basis	It is skill-based.	It is behaviour-based.
Usage	Competence can be used in casual as well as formal situations.	Competency is mostly used in professional jargon.
Assessment	It assesses the standard of performance that a person shows.	It assesses the behaviour and way in which the standard has been achieved by a person.
Characteristics	Its characteristics include skills like communication, leadership, etc., and knowledge.	Its characteristics include a person's behavioural attributes like confidence, determination, honesty, etc.



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Teaching competency is an inherent element of an effective training process, one that aspires to contribute to the welfare of a particular country or the world itself.

The central figures in the educational process are teachers. The success of training and education depends on their preparation, erudition and performance quality.



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The competency of a teacher is more than just knowledge and skills; it involves the ability to meet complex demands by drawing on and mobilizing psychosocial resources (including skills and attitudes) in a particular context.

Competency is essential to an educator's pursuit of excellence. Teachers need a wide range of competencies in order to face the complex challenges of today's world. Digital competence is one of them.



What Are Digital Competences?



In 2006 the European Parliament and the Council (2006) published a recommendation identifying eight Key Competences for Lifelong Learning:

- Communication in the Mother Tongue;
- Communication in Foreign Languages;
- Mathematical Competence and Basic Competences in Science and Technology;
- Digital Competence;
- Learning to Learn;
- Social and Civic Competences;

Four years afterwards, the value of this recommendation is recognised in the Europe 2020 Strategy (European Commission, 2010b). The 2006 recommendation already points to Digital Competence as a fundamental basic skill.

The concept of digital competence has emerged concurrently with technological development and as society has recognized the need for new competences.

Development of technologies enables and constantly creates new activities and goals, and the importance of digital competence is therefore constantly changing and must always be seen in relation to the current technology and its application.

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Digital Competence involves the confident and critical use of Information Society Technology (IST) for work, leisure and communication. It is underpinned by basic skills in ICT: the use of computers to retrieve, assess, store, produce, present and exchange information, and to communicate and participate in collaborative networks via the Internet.”

European Parliament and the Council, 2006



The Facts of Digital Competences and VET



The landscape of teaching and learning in VET is changing, as are the skills the labour market needs, reinforcing the need for VET teachers to keep abreast of new pedagogical approaches and classroom technology and keep up to date with the realities of the workplace. For example, increasing demand for basic, digital and soft skills in the labour market means VET teachers need to equip themselves with these skills and teach them to their students.

Briefly, the learning paradigm is increasingly changing under the influence of Information and Communication Technologies (ICT). The question of how to properly use ICT in teaching practice remains challenging a challenge for existing teachers, but also a challenge for future professionals whose professional development starts at the university. Adequate digital education is at the core of vocational training and life long learning. Digital competences are an essential element of the European Competence Reference Framework and one of the eight competences needed to improve personal development, active citizenship, social inclusion and employability (Tsankov and Damyanov, 2019).



Professional teachers' competence in digital pedagogy is seen as a combination of professional, substantial, pedagogical and technological expertise (Attwell, & Gerrard, 2019).

The Facts of Digital Competences and VET



As the teaching professions face rapidly changing demands, educators require an increasingly broad and more sophisticated set of competences than before. In particular the ubiquity of digital devices and the duty to help students become digitally competent requires educators to develop their own digital competence (Punie, 2017).



Do you know this?

Digitalisation, automation, the transition to a low-carbon economy and the COVID-19 pandemic are having a major impact on the skills needed in the labour market, and therefore also on the skills that need to be formed through VET.

Development of digital competences should be regarded as a continuation from instrumental skills towards more productive, communicative, critical and strategic competences.

As VET programmes need to evolve in order to adapt to changing skill needs, VET teachers must not only update their knowledge and practice, but also exploit new approaches to teaching, such as the use of virtual/augmented reality (VR/AR). This process has been accelerated by the COVID-19 pandemic, which has partially shifted VET towards remote learning to ensure the continuity of training.

High Consumption of technology as such should not be regarded as proof of digital competence (Van Deursen, 2010).

Digital Competence has Four Main Areas



Information

Ability to identify, locate, retrieve, store, organise and analyse digital information and evaluate relevance and purpose

Communication

Ability to communicate, collaborate, interact with and participate in virtual teams and networks as well as make use of appropriate media, tone and behavior.

Production

Ability to create, configure, and edit digital content, solve digital problems and explore new ways to take advantage of technology.

Safety

Ability to use digital technology safely and sustainably in relation to data, identity and work injuries and to pay attention to legal consequences, rights and duties.

Digital Competence Consists of Several Learning Domains for VET Teachers



Knowledge

Productive knowledge includes, the awareness of new technologies and how they can usefully support an existing workflow process.

Communicative knowledge includes, theories on media effects or the knowledge of a range of digital collaboration tools.

Informative knowledge includes, the knowledge of relevant search engines, self-service solutions, storage possibilities and strategies for assessing the validity of the information.

Skills

Productive skills are, for example, the ability to use a variety of applications to create or edit multimedia of various kinds.

Communicative skills are, for example, the use of methodologies, strategies and applications to solve communicative tasks.

Informative skills are, for example, the use of logins, finding sources for an assignment, or converting a file to another format.

Attitudes

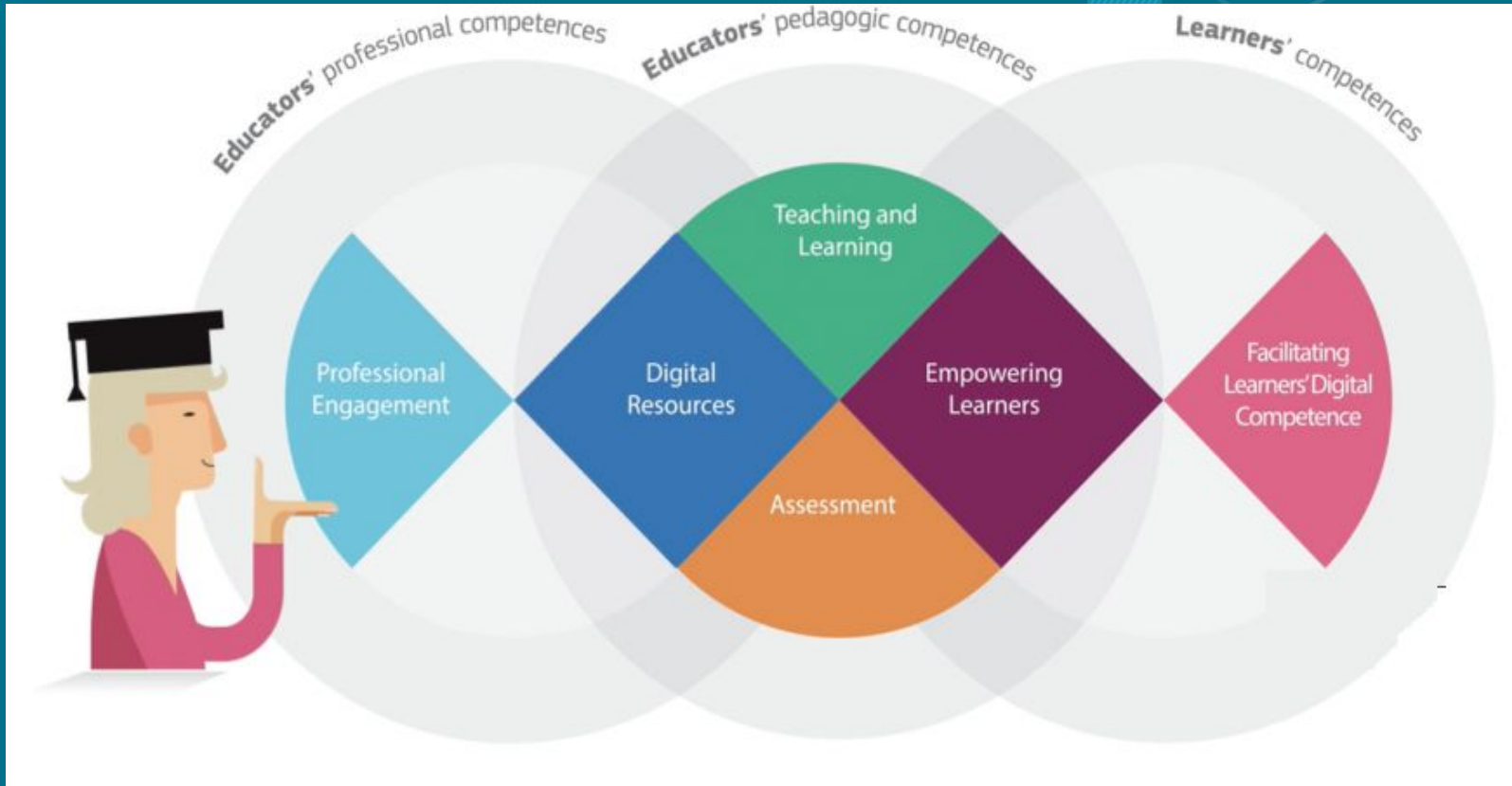
Attitudes towards digital production can, include ethical considerations in relation to what should be produced and shared.

Attitudes toward communication can, be whether you find value and meaning by talking to others via media. Or, if you are very careful with formulations so that they are not misunderstood by the recipient.

Attitudes towards information can, be a proactive, analytical or critical position on finding and storing digital information.

Source: Skov, 2016.

Digital Competence of Educators (DigCompEdu)



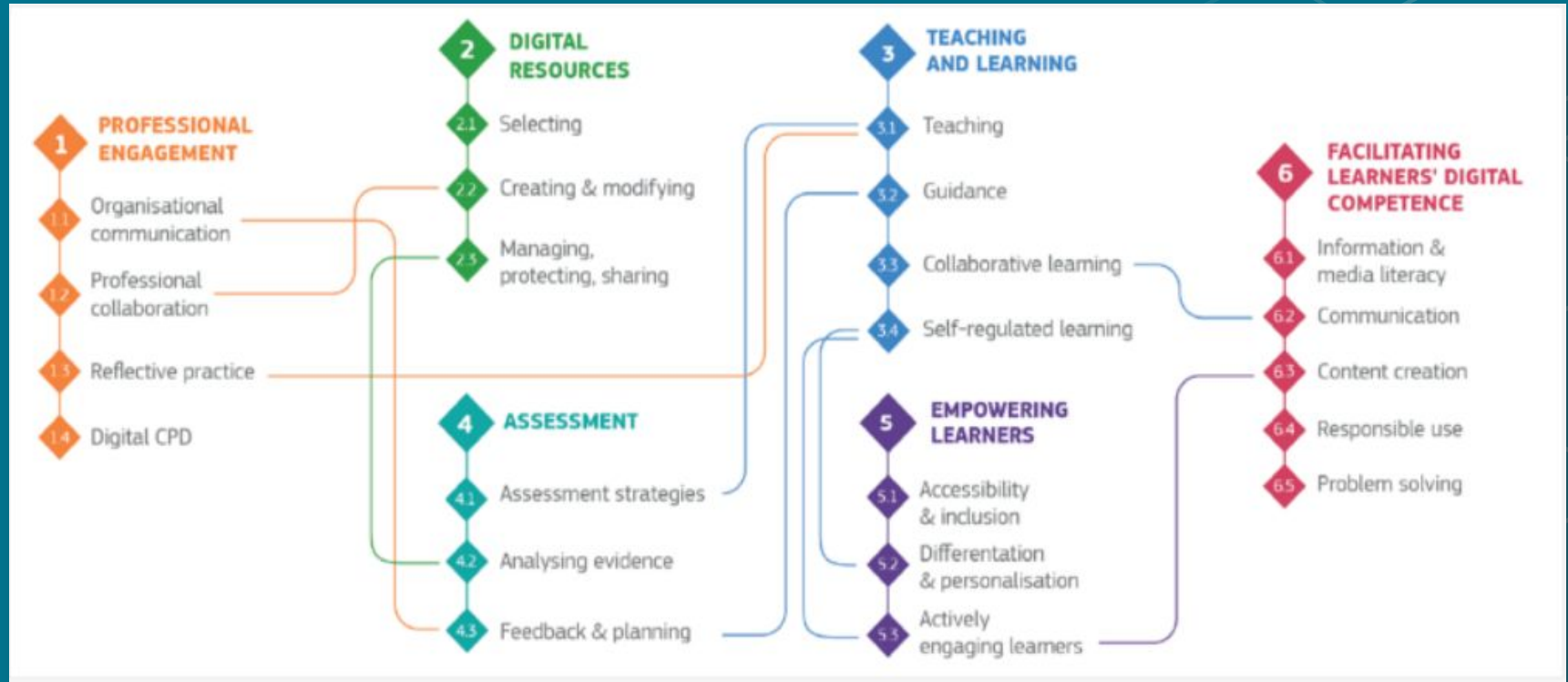
Digital Competence of Educators (DigCompEdu)

The European Framework for the Digital Competence of Educators (DigCompEdu) is a scientifically sound framework describing what it means for educators to be digitally competent. It provides a general reference frame to support the development of educator-specific digital competences in Europe (Redecker, 2017).

DigCompEdu is directed towards educators at all levels of education, from early childhood to higher and adult education, including general and vocational education and training, special needs education, and non-formal learning contexts (Redecker, 2017).

[Watch this short audiovisual.](#)

DigCompEdu is a digital competence model with 6 differentiated competence areas as indicated by below figure. Each area has a series of competencies that “teachers must have in order to promote effective, inclusive and innovative learning strategies, using digital tools” (Redecker y Punie, [2017](#), p. 4).



Interesting sources



As VET programmes need to evolve in order to adapt to changing skill needs, VET teachers must not only update their knowledge and practice, but also exploit new approaches to teaching, such as the use of virtual/augmented reality (VR/AR). [Read this report for more details.](#)



VET-TEDD is an Erasmus Plus funded project providing free to use & accessible resources that support the development of digital competences in Vocational Education Teachers. [This short video explains the project and its outputs.](#)



What can project-based learning and '20% time' do for your classroom? Esther Wojcicki is an American journalist, author, educator, and vice chair of the Creative Commons board of directors. In this interview she shares her views about digital revolution in the classroom. The interview is subtitled in 23 languages. [Digital revolution in the classroom - Education Talks](#)

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- Tsankov, N., & Damyanov, I. (2019). *The Digital Competence of Future Teachers: Self-Assessment in the Context of their Development. International Journal of Interactive Mobile Technologies, 13(12)*

Test yourself

Question 1:

“VET should be delivered by highly qualified teachers and experienced trainers who are supported through initial and continuing professional development (including digital skills and innovative teaching methods) in view of delivering high quality learning outcomes.”

a. True

b. False

Question 2:

“Competence and Competency are the exactly same concepts.”

a. True

b. False

Test yourself

Question 3:

“..... refers to the capability of an individual to carry out a particular task.”

”

a. Competence

b. Competency

Question 4:

“It assesses the behaviour and way in which the standard has been achieved by a person.”

a. Competence

b. Competency

Test yourself

Question 5:

“Teaching competency is an inherent element of an effective training process, one that aspires to contribute to the welfare of a particular country or the world itself.”

a. True

b. False

Question 6:

“The central figures in the educational process are online tools”

a. True

b. False

Test yourself

Question 7:

“Teachers need a wide range of competencies in order to face the complex challenges of today’s world. Digital competence is one of them.”

a. True

b. False

Question 8:

“The concept of digital competence has emerged concurrently with agricultural revaluation and as society has recognized the need for new competences.”

a. True

b. False

Test yourself

Question 9:

“Professional teachers’ competence in digital pedagogy is seen as a combination of professional, substantial, pedagogical and technological expertise”

a. True

b. False

Question 10:

“As VET programmes need to evolve in order to adapt to changing skill needs, VET teachers must only update their knowledge and practice.”

a. True

b. False

Summary – key take-aways

- VET should be delivered by highly qualified teachers and experienced trainers
- Today, educational activities of teachers exceed the implementation of syllabi and acquire features of educational multi-functionality.
- VET teachers require both pedagogical and industry knowledge to prepare young people and adults for the labour market.
- The main difference between competence and competency is that the former is based on the skill while the latter refers to the behavior of an individual.
- The competency of a teacher is more than just knowledge and skills; it involves the ability to meet complex demands by drawing on and mobilizing psychosocial resources (including skills and attitudes) in a particular context.

Continuing professional development in digital education for VET

This training material is one of the outcomes of the Erasmus+ project: **“Continuing professional development in digital education for VET”** and it has been created to help teachers across Europe to address the challenging situation in online training delivery in VET.

The CPD program consist of three independent parts:

- Training modules
- Instruction set of sample online lessons
- Guide to the CPD training program

All project outputs have been produced by seven partners from seven European countries working together:

- ProEduca z.s., Czech Republic
- Archivio della Memoria, Italy
- Asociația Pentru Sprijinirea Inițiativelor Educaționale, Romania
- Solution Based Training & Consultancy (SBTC), Turkey
- CEBEM FORMACIÓN PROFESIONAL SL (Daniel Castela), Spain
- TUS Midwest, Ireland
- Northern Regional College, UK

All materials are available (downloadable) free of charge from the project web-page: <https://www.covet-project.eu/>



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