DigCompEdu

in a nutshell
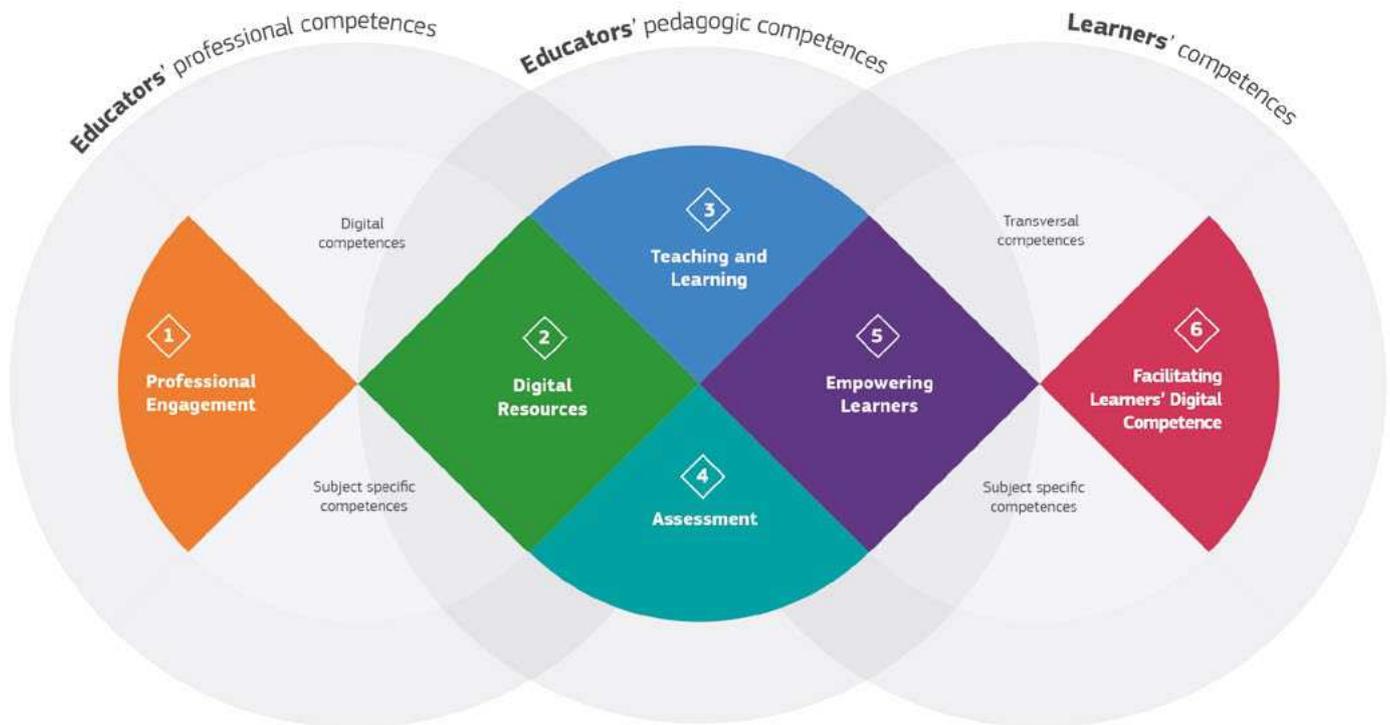
FIGURE 2: DIGCOMPEDU AREAS AND SCOPE

Educators are role models for the next generation. It is therefore vital for them to be equipped with the digital competence all citizens need to be able to actively participate in a digital society. The European Digital Competence Framework for Citizens (DigComp) specifies these competences. DigComp has become a widely accepted tool for measuring and certifying Digital Competence and has been used as a basis for teacher training and professional development across and beyond Europe. As citizens, educators need to be equipped with these competences to participate in society, both personally and professionally. As role models, they need to be able to clearly demonstrate their digital competence to learners and to pass on their creative and critical use of digital technologies.

However, educators are not just role models. They are first and foremost learning facilitators, or more plainly: teachers. As professionals dedicated to teaching, they need, in addition to the general digital competences for life and work, educator-specific digital competences to be able to effectively use digital technologies for teaching. The aim of the DigCompEdu framework is to capture and describe these educator-specific digital competences.

The DigCompEdu framework distinguishes six different areas in which educators' Digital Competence is expressed with a total of 22 competences (see Figure 3, p. 16).
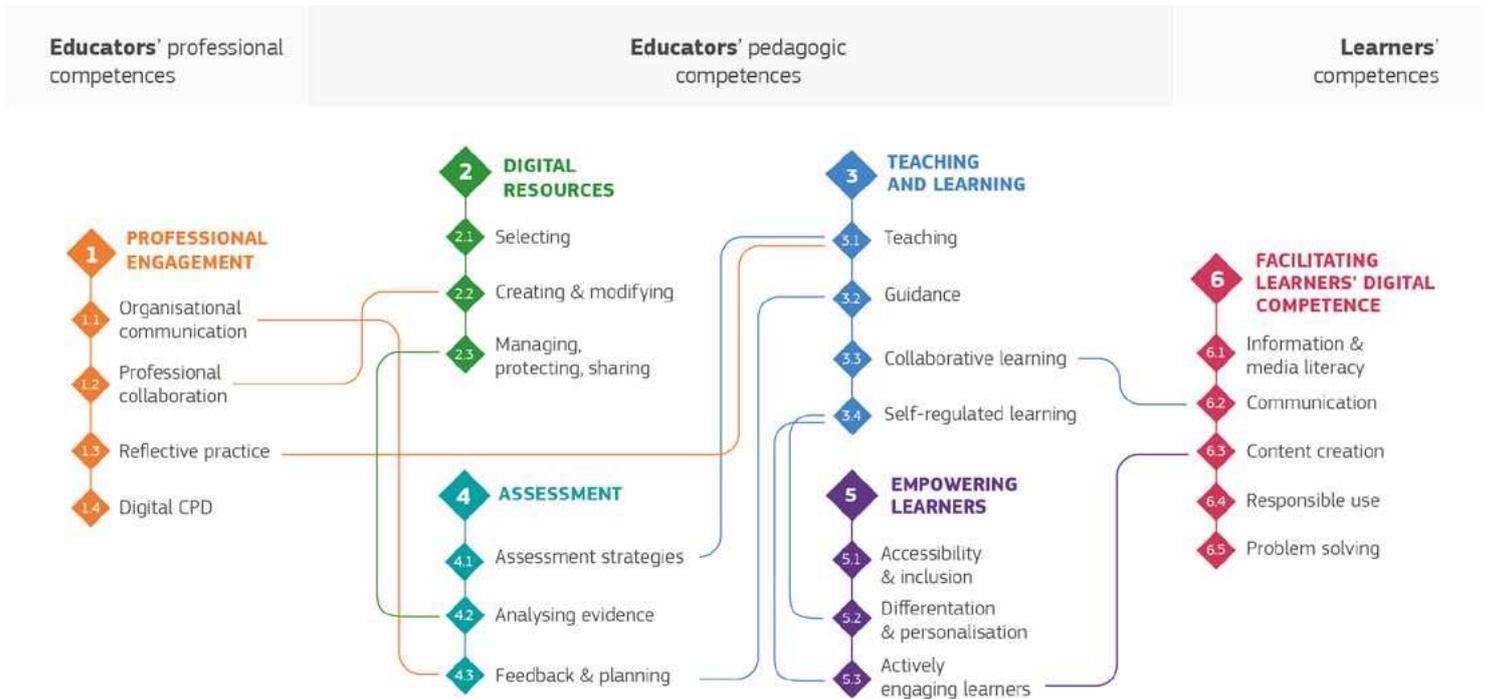
FIGURE 3: DIGCOMPEDU COMPETENCES AND THEIR CONNECTIONS

The six DigCompEdu areas focus on different aspects of educators' professional activities:

Area 1: Professional Engagement

Using digital technologies for communication, collaboration and professional development.

Area 2: Digital Resources

Sourcing, creating and sharing digital resources.

Area 3: Teaching and Learning

Managing and orchestrating the use of digital technologies in teaching and learning.

Area 4: Assessment

Using digital technologies and strategies to enhance assessment.

Area 5: Empowering Learners

Using digital technologies to enhance inclusion, personalisation and learners' active engagement.

Area 6: Facilitating Learners' Digital Competence

Enabling learners to creatively and responsibly use digital technologies for information, communication, content creation, wellbeing and problem-solving.

The core of the DigCompEdu framework is defined by Areas 2-5. Together these areas explain educators' digital pedagogic competence, i.e. the digital competences educators need to foster efficient, inclusive and innovative teaching and learning strategies. Areas 1, 2 and 3 are anchored in the stages characteristic of any teaching process, whether supported by technologies or not. The competences listed in these areas detail how to make efficient and innovative use of digital technologies when planning (Area 2), implementing (Area 3) and assessing (Area 4) teaching and learning. Area 5 acknowledges the potential of digital technologies for learner-centred teaching and learning strategies. This area is transversal to Areas 2, 3 and 4 in the sense that it contains a set of guiding principles relevant for and complementary to the competences specified in these areas.

To give an example, educators proficient in Area 2 will select, create and adapt digital resources to suit the learning objective and existing competence level of the learner group. They will ideally choose and/or compile learning activities that help their learners to effectively achieve a given learning objective. An educator proficient in Area 5 will select, create and adapt digital resources to empower learners. In this respect, he/she will make the resources accessible to all learners; foresee different, personalised learning pathways; and design the resources so as to actively involve and engage all learners. Obviously, a digitally-competent educator should consider both sets of objectives, i.e. address the concrete learning objective (Area 2) and empower learners (Area 5). Whereas the former is specific to the process of selection or creation, the latter is generically applicable to all competences in Areas 2-4.

This pedagogic core of the framework is complemented by Areas 1 and 6. Area 1 is directed at the broader professional environment, i.e. educators' use of digital technologies in professional interactions with colleagues, learners, parents and other interested parties, for their own individual professional development and for the collective good of the organisation. Areas 6 details the specific pedagogic competences required to facilitate students' digital competence.

Both areas acknowledge that educators' digital competence goes beyond the concrete use of digital technologies within teaching and learning. Digitally competent educators must also consider the overall environment, in which teaching and learning encounters are embedded. Hence, it is part of educators' digital competence to enable learners to actively participate in life and work in a digital age. It is also part of their competence to reap the benefits of digital technologies for enhancing pedagogic practice and organisational strategies.

Overview

1.Professional Engagement

1.1 Organisational communication
To use digital technologies to enhance organisational communication with learners, parents and third parties. To contribute to collaboratively developing and improving organisational communication strategies.

1.2 Professional collaboration
To use digital technologies to engage in collaboration with other educators, sharing and exchanging knowledge and experiences and collaboratively innovating pedagogic practices.

1.3 Reflective practice
To individually and collectively reflect on, critically assess and actively develop one's own digital pedagogical practice and that of one's educational community.

1.4 Digital Continuous Professional Development (CPD)
To use digital sources and resources for continuous professional development.

2.Digital Resources

2.1 Selecting digital resources
To identify, assess and select digital resources for teaching and learning. To consider the specific learning objective, context, pedagogical approach, and learner group, when selecting digital resources and planning their use.

2.2 Creating and modifying digital resources
To modify and build on existing openly-licensed resources and other resources where this is permitted. To create or co-create new digital educational resources. To consider the specific learning objective, context, pedagogical approach, and learner group, when designing digital resources and planning their use.

2.3 Managing, protecting and sharing digital resources
To organise digital content and make it available to learners, parents and other educators. To effectively protect sensitive digital content. To respect and correctly apply privacy and copyright rules. To understand the use and creation of open licenses and open educational resources, including their proper attribution.

3.Teaching and Learning

3.1 Teaching
To plan for and implement digital devices and resources in the teaching process, so as to enhance the effectiveness of teaching interventions. To appropriately manage and orchestrate digital teaching interventions. To experiment with and develop new formats and pedagogical methods for instruction.

3.2 Guidance
To use digital technologies and services to enhance the interaction with learners, individually and collectively, within and outside the learning session. To use digital technologies to offer timely and targeted guidance and assistance. To experiment with and develop new forms and formats for offering guidance and support.

3.3 Collaborative learning
To use digital technologies to foster and enhance learner collaboration. To enable learners to use digital technologies as part of collaborative assignments, as a means of enhancing communication, collaboration and collaborative knowledge creation.

3.4 Self-regulated learning
To use digital technologies to support self-regulated learning processes, i.e. to enable learners to plan, monitor and reflect on their own learning, provide evidence of progress, share insights and come up with creative solutions.

4.Assessment

4.1 Assessment strategies
To use digital technologies for formative and summative assessment. To enhance the diversity and suitability of assessment formats and approaches.

4.2 Analysing evidence
To generate, select, critically analyse and interpret digital evidence on learner activity, performance and progress, in order to inform teaching and learning.

4.3 Feedback and planning
To use digital technologies to provide targeted and timely feedback to learners. To adapt teaching strategies and to provide targeted support, based on the evidence generated by the digital technologies used. To enable learners and parents to understand the evidence provided by digital technologies and use it for decision-making.

5.Empowering Learners

5.1 Accessibility and inclusion
To ensure accessibility to learning resources and activities, for all learners, including those with special needs. To consider and respond to learners' (digital) expectations, abilities, uses and misconceptions, as well as contextual, physical or cognitive constraints to their use of digital technologies.

5.2 Differentiation and personalisation
To use digital technologies to address learners' diverse learning needs, by allowing learners to advance at different levels and speeds, and to follow individual learning pathways and objectives.

5.3 Actively engaging learners
To use digital technologies to foster learners' active and creative engagement with a subject matter. To use digital technologies within pedagogic strategies that foster learners' transversal skills, deep thinking and creative expression. To open up learning to new, real-world contexts, which involve learners themselves in hands-on activities, scientific investigation or complex problem solving, or in other ways increase learners' active involvement in complex subject matters.

6.Facilitating Learners' Digital Competence

6.1 Information and media literacy
To incorporate learning activities, assignments and assessments which require learners to articulate information needs; to find information and resources in digital environments; to organise, process, analyse and interpret information; and to compare and critically evaluate the credibility and reliability of information and its sources.

6.2 Digital communication & collaboration
To incorporate learning activities, assignments and assessments which require learners to effectively and responsibly use digital technologies for communication, collaboration and civic participation.

6.3 Digital content creation
To incorporate learning activities, assignments and assessments which require learners to express themselves through digital means, and to modify and create digital content in different formats. To teach learners how copyright and licenses apply to digital content, how to reference sources and attribute licenses.

6.4. Responsible use
To take measures to ensure learners' physical, psychological and social wellbeing while using digital technologies. To empower learners to manage risks and use digital technologies safely and responsibly.

6.5 Digital problem solving
To incorporate learning activities, assignments and assessments which require learners to identify and solve technical problems, or to transfer technological knowledge creatively to new situations.

TABLE 7: OVERVIEW OF DIGCOMPEDU FRAMEWORK

Learning to swim in the Digital Ocean: THE DIGITAL COMPETENCE FRAMEWORK FOR CITIZENS (V. 2.1)

Foundation		Intermediate		Advanced		Highly-specialised	
Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	Level 7	Level 8

Level 1
- SIMPLE TASKS
- WITH GUIDANCE
- REMEMBERING

Level 3
- WELL-DEFINED AND ROUTINE TASKS, AND STRAIGHTFORWARD PROBLEMS
- ON MY OWN
- UNDERSTANDING

Level 5
- DIFFERENT TASKS AND PROBLEMS
- GUIDING OTHERS
- APPLYING

Level 7
- RESOLVE COMPLEX PROBLEMS WITH LIMITED SOLUTIONS
- INTEGRATE TO CONTRIBUTE TO THE PROFESSIONAL PRACTICE AND TO GUIDE OTHERS
- CREATING
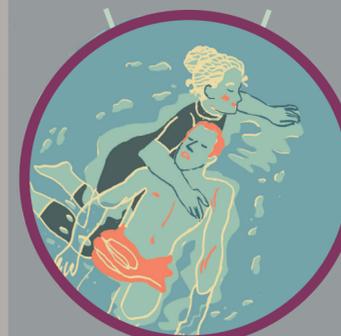
Level 2
- SIMPLE TASKS
- AUTONOMY AND WITH GUIDANCE WHERE NEEDED
- REMEMBERING

Level 4
- TASKS, AND WELL-DEFINED & NON-ROUTINE PROBLEMS
- INDEPENDENT AND ACCORDING TO MY NEEDS
- UNDERSTANDING

Level 6
- MOST APPROPRIATE TASKS
- ABLE TO ADAPT TO OTHERS IN A COMPLEX CONTEXT
- EVALUATING

Level 8
- RESOLVE COMPLEX PROBLEMS WITH MANY INTERACTING FACTORS
- PROPOSE NEW IDEAS AND PROCESSES TO THE FIELD
- CREATING

ILLUSTRATION: EL RUBENCIO

■ COMPLEXITY OF TASKS   ● AUTONOMY   ▲ COGNITIVE DOMAIN

European Commission

European Framework for the
Digital Competence
of Educators

DigCompEdu

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