

Assessing Educators' Digital Competence



To encourage take-up, it is proposed to refer to proficiency levels using motivating role descriptors. These can, however, be mapped onto the proficiency levels used by the Common European Framework of Reference for Languages (CEFR), ranging from A1 (Newcomer) to C2 (Pioneer). In general, the following characterisations apply:

Newcomers (A1) have had very little contact with digital tools and need guidance to expand their repertoire.

Explorers (A2) have started using digital tools without, however, following a comprehensive or consistent approach. Explorers need insight and inspiration to expand their competences.

Enthusiasts (B1) experiment with digital tools for a range of purposes, trying to understand which digital strategies work best in which contexts.

Professionals (B2) use a range of digital tools confidently, creatively and critically to enhance their professional activities. They continuously expand their repertoire of practices.

Experts (C1) rely on a broad repertoire of flexible, comprehensive and effective digital strategies. They are a source of inspiration for others.

Pioneers (C2) question the adequacy of contemporary digital and pedagogical practices, of which they themselves are experts. They lead innovation and are a role model for younger teachers.

	Newcomer (A1)	Explorer (A2)	Enthusiast (B1)	Professional (B2)	Expert (C1)	Pioneer (C2)
1. Professional Engagement	Making little use ; Being unsure	Being aware ; Basic tool use	Effective use ; Responsible use ; Experimentation	Structured ; Creative ; Responsive ; Transparent ; Reflected practice	Critically, Strategically: Evaluating , Discussing , Reflecting	Re-designing , Innovating
2. Digital Resources	Making little use ; Being unsure	Being aware ; Basic tool use	Basic criteria ; Basic strategies Some advanced features	Advanced strategies ; Complex criteria ; Creating resources	Comprehensively using Advanced tools ; Publishing resources	Professionally creating & publishing
3. Digital Pedagogy	Making little use ; Being unsure	Being aware ; Basic tool use	Integrating & Implementing meaningfully	Enhancing , Scaffolding	Orchestrating; flexibly adapting ; strategically ; purposefully	Innovating teaching
4. Digital Assessment	Making little use ; Being unsure	Basic tool use within traditional approaches	Employing digital tools to enhance traditional approaches	Strategic , Effective use	Comprehensive , Critical , Reflective practice	Innovating assessment
5. Empowering Learners	Making little use ; Being unsure	Being aware ; Basic tool use	Addressing learner empowerment	Strategically using a Range of tools to empower	Comprehensively , Critically Enhancing	Innovating strategies
6. Learners' DC	Making little use of strategies for learners' DC	Encouraging learners to use digital tools	Implementing activities fostering learners' DC	Strategically using a range of strategies	Comprehensively and critically fostering learners' DC	Using innovative formats for fostering learners' DC

Figure 3: Key words used in the proficiency progression

Online Stakeholder consultation

From March to May 2017 all stakeholders and interested parties are invited to contribute to refining the framework: <https://ec.europa.eu/eusurvey/runner/DigCompEduConsultation> and its accompanying self-assessment questionnaire: <https://ec.europa.eu/eusurvey/runner/DigCompEduSAQ>

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Proposal for a European Framework for the Digital Competence of Educators (DigCompEdu)

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

The DigCompEdu framework aims to capture these educator-specific digital competences.

The framework is directed towards educators at all levels of education, from early childhood to higher and adult education, including general and vocational training, special needs education, and non-formal learning contexts. It aims to provide a general reference frame for developers of Digital Competence models, i.e. Member States, regional governments, national and regional agencies, educational organisations themselves, and public or private professional training providers.

DigCompEdu considers six different competences areas with a total of 23 competences.

Area 1 focuses on the professional environment;

Area 2 on sourcing, creating and sharing digital resources;

Area 3 on managing and orchestrating the use of digital tools in teaching and learning;

Area 4 on digital tools and strategies to enhance assessment;

Area 5 on the use of digital tools to empower learners;

Area 6 on facilitating learners' digital competence.

Areas 2 to 5 form the pedagogic core of the framework. They detail the competences educators need to possess to foster effective, inclusive and innovative learning strategies, using digital tools.

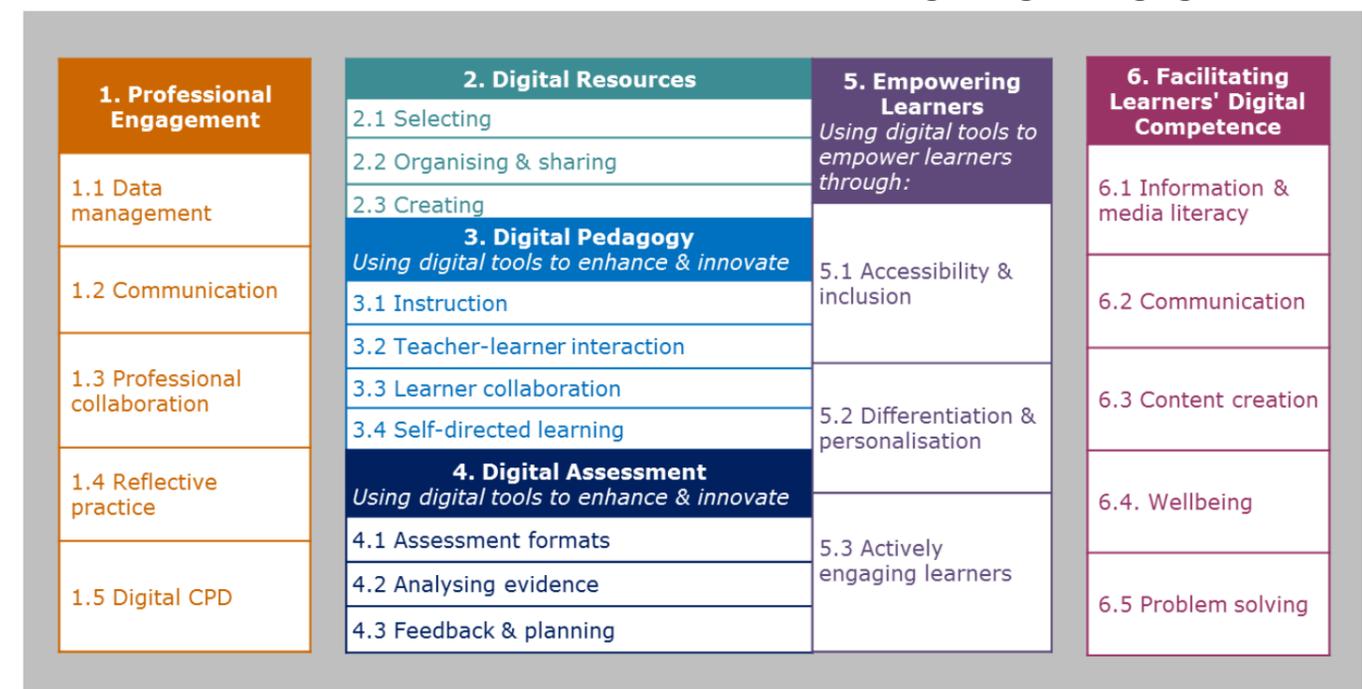


Figure 1: Overview of the DigCompEdu framework

Joint
Research
Centre

Synthesis of the DigCompEdu Proposal



Figure 2: Synthesis of the DigCompEdu competence descriptors

1. Professional engagement	2. Digital Resources	3. Digital Pedagogy	4. Digital Assessment	5. Empowering Learners	6. Facilitating Learners' Digital Competence
<p>1.1 Data management To use digital tools to effectively and safely store, retrieve, analyse and share administrative and student-related data. To contribute to discussing and critically reflecting on data management strategies and policies at the organisational level.</p> <p>1.2 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.</p> <p>1.3 Professional collaboration To use digital technologies to engage in collaboration with other educators, sharing and exchanging knowledge and experience and collaboratively innovating pedagogic practices. To use professional collaborative networks as a source for one's own professional development.</p> <p>1.4 Reflective practice To individually reflect on, critically assess and actively develop one's digital pedagogical practice.</p> <p>1.5 Digital Continuous Professional Development (CPD) To use digital sources and resources for continuous professional development.</p>	<p>2.1 Selecting digital resources To identify, assess and select digital resources for teaching and learning, understanding applicable copyright and accessibility requirements.</p> <p>2.2 Organising, sharing and publishing digital resources To organise digital resources for one's own current and future use and re-use, as well as for sharing them with others. To digitally publish learning resources and share them with learners, parents and other educators, respecting the rules of copyright. To understand the use and creation of open licences and open educational resources, including their proper attribution.</p> <p>2.3 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.</p>	<p>3.1 Instruction To implement digital devices and resources into the teaching process, so as to enhance the effectiveness of instructional practices. To appropriately scaffold, manage and orchestrate digital teaching interventions. To experiment with and develop new formats and pedagogical methods for instruction.</p> <p>3.2 Teacher-learner interaction To use digital tools 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.</p> <p>3.3 Learner collaboration To use digital technologies to foster and enhance collaborative learning strategies, e.g. as a basis for the collaborative exchange in the group, as a tool for conducting a collaborative assignment, or as a means of presenting results.</p> <p>3.4 Self-directed learning To use digital technologies to support self-directed learning processes, i.e. to enable learners to plan, monitor and reflect on their own learning, evidence progress, share insights and come up with creative solutions.</p>	<p>4.1 Assessment formats To use digital tools for formative and summative assessment. To enhance the diversity and suitability of assessment formats and approaches.</p> <p>4.2 Analysing evidence To generate, select, critically analyse and interpret digital evidence on learner activity, performance and progress, in view of informing teaching and learning.</p> <p>4.3 Feedback and Planning To use digital tools to provide targeted and timely feedback to learners. To adapt teaching strategies accordingly and to provide targeted support, based on the evidence generated by the digital tools used. To enable learners and parents to understand the evidence provided by digital tools and use it for decision-making.</p>	<p>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 tools.</p> <p>5.2 Differentiation and personalisation To use digital tools to address learners diverse learning needs, e.g. by allowing them to follow different learning pathways and goals, by offering alternative approaches and tools, and allowing learners to proceed at different speeds towards individual learning goals.</p> <p>5.3 Actively engaging learners To use digital tools to foster learners' active and creative engagement with a subject matter.</p>	<p>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 their sources.</p> <p>6.2 Digital communication & collaboration To incorporate learning activities, assignments and assessments which require learners to effectively and responsibly use digital tools for communication, collaboration and civic participation.</p> <p>6.3 Digital content creation To incorporate assignments and learning activities 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 licences apply to digital content, how to reference sources and attribute licenses.</p> <p>6.4. Wellbeing To take measures to ensure learners' physical, psychological and social well-being while using digital technologies. To empower learners to manage risks and make use of digital technologies to support their own social, psychological and physical wellbeing.</p> <p>6.5 Digital problem solving To incorporate learning and assessment activities which require learners to identify and solve technical problems or to transfer technological knowledge creatively to new situations.</p>