



# Comprehensive List of Digital Competences for Educators

EdDiCo Output 1

Working Paper

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## Contributors

The work presented here relies heavily on elements of the DigCompEdu Framework. Only elements marked in yellow are our own creation (i.e., the categories 3.5 Gamification, 4.4 (Micro-) Credentialisation, 4.5 Recognition, 5.4 Agile Working, and 7.1, 7.2 and 7.3 Health). All other sections originate from the DigCompEdu Framework and are cited with reference to the DigCompEdu reuse policy.

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## The EdDico Consortium

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	<b>A2 Explorer</b>	<b>B2 Expert</b>	<b>C2 Pioneer</b>
<b>1. Professional engagement</b>	EXPLORING DIGITAL OPTIONS	ENHANCING PROFESSIONAL PRACTICE	INNOVATING PROFESSIONAL PRACTICE
<b>1.1 Organisational communication</b> To use digital technologies to enhance organisational communication with learners, parents and third parties. To contribute to collaboratively developing and improving organisational communication strategies.	Being aware and making basic use of digital technologies for communication.	Using digital technologies for communication in an effective and responsible way.	Evaluating and discussing communication strategies.
<b>1.2 Professional collaboration</b> To use digital technologies to engage in collaboration with other educators, sharing and exchanging knowledge and experiences and collaboratively innovating pedagogic practices.	Being aware and making basic use of digital technologies for collaboration.	Using digital technologies for collaborative knowledge construction.	Using digital technologies to facilitate innovative practice.
<b>1.3 Reflective practice</b> To individually reflect on, critically assess and actively develop one's own digital pedagogical practice and that of one's educational community.	Being aware of one's development needs.	Using a range of resources to develop one's individual digital and pedagogic practices.	Innovating educational policies and practices.
<b>1.4 Digital Continuous Professional Development (CPD)</b> To use digital sources and resources for continuous professional development.	Using the internet for updating knowledge.	Exploring online CPD opportunities.	Using the internet to provide CPD to peers.
<b>2. Digital Resources</b>	EXPLORING DIGITAL RESOURCES	STRATEGICALLY USING INTERACTIVE RESOURCES	PROMOTING THE USE OF DIGITAL RESOURCES
<b>2.1 Selecting digital resources</b> 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.	Being aware and making basic use of digital technologies for finding resources.	Identifying and assessing suitable resources using complex criteria.	Promoting the use of digital resources in education.
<b>2.2 Creating and modifying digital resources</b> 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.	Creating and modifying resources using basic tools and strategies.	Adapting advanced digital resources to a concrete learning context.	Creating complex, interactive digital resources.

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<p><b>2.3 Managing, protecting and sharing digital resources</b> To organise digital content and make it available to learners, parents and other educators. To effectively protect sensitive digital content. To respect privacy and copyright rules. To understand the use and creation of open licenses and open educational resources, including their proper attribution.</p>	Managing resources using basic strategies.	Professionally sharing resources.	Professionally publishing self-created digital content.
<b>3. Teaching and Learning</b>	EXPLORING DIGITAL TEACHING & LEARNING STRATEGIES	ENHANCING TEACHING & LEARNING ACTIVITIES	INNOVATING TEACHING
<p><b>3.1 Teaching</b> To plan for and implement digital devices and resources into 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.</p>	Making basic use of available digital technologies for instruction.	Using digital technologies purposefully to enhance pedagogic strategies.	Using digital technologies to innovate teaching strategies.
<p><b>3.2 Guidance</b> 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.</p>	Employing basic digital strategies to interact with learners.	Using digital technologies to enhance monitoring and guidance.	Using digital technologies to innovate guidance provision.
<p><b>3.3 Collaborative learning</b> To use digital technologies to foster and enhance learner collaboration. To enable learners to use digital technologies as part of collaborative assignments, as means for enhancing communication and collaboration and for collaborative knowledge creation.</p>	Encouraging learners to use digital technologies in their collaborative activities.	Using digital environments to support collaborative learning.	Using digital technologies to innovate learner collaboration.
<p><b>3.4 Self-regulated learning</b> 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.</p>	Encouraging learners to use digital technologies in self-regulated learning activities.	Using digital environments to comprehensively support self-regulated learning.	Developing new digital formats and/or pedagogic approaches for self-regulated learning.

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<b>3.5 Gamification</b> To use gamification elements such as challenges, competitions, points, badges, and leaderboards to make the learning experience more enjoyable and the learning outcome more sustainable.	Being able to apply a digitally supported gamified process in teaching and learning situations to improve student's involvement if provided with the technology.	Being able to apply a digitally supported gamification process in teaching and learning situations and choose the best technology to obtain the desired learning outcomes.	Being able to design, implement and evaluate a digitally supported gamification process regardless of available digital technology. Being able to integrate the activities in the whole learning process; using the potential of digitally supported gamification for motivation, creativity & autonomy of learners, as well as for tolerance towards complexity and failure.
<b>4. Assessment</b>	EXPLORING DIGITAL ASSESSMENT STRATEGIES	STRATEGIC AND EFFECTIVE USE OF DIGITAL ASSESSMENT	INNOVATING ASSESSMENT
<b>4.1 Assessment strategies</b> To use digital technologies for formative and summative assessment. To enhance the diversity and suitability of assessment formats and approaches.	Integrating digital technologies into traditional assessment strategies.	Strategically using a range of digital assessment formats.	Developing innovative assessment formats, using digital technologies.
<b>4.2 Analysing evidence</b> To generate, select, critically analyse and interpret digital evidence on learner activity, performance and progress, in order to inform teaching and learning.	Evaluating basic data on learner activity and performance.	Strategically employing digital tool for data generation.	Innovating data generation and evaluation.
<b>4.3 Feedback and Planning</b> To use digital technologies 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 technologies used. To enable learners and parents to understand the evidence provided by digital technologies and use it for decision-making.	Using digital technologies to inform feedback.	Using digital data to enhance the effectiveness of feedback and support.	Using digital data to evaluate and improve teaching

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<p><b>4.4 (Micro-) Credentialisation</b> Teacher is capable that badges/credentials are designed in a way and contain all the available information to facilitate recognition (of intermediate achievements).</p>	<p>Using existing systems to issue digital credentials. Designing micro-credentials on the levels of micro and macro curriculum level and the links and meta-data between the credential and digital curriculum in a virtual learning environment.</p>	<p>Using and explaining credentialing systems to design and issue digital credentials. Consulting on the process of designing digital credentials and peer-reviewing micro-credentials developed on the micro and macro curriculum level and reviewing as well as updating the meta-data for credentials on learning outcomes, assessment method, EQF level etc. from IT systems such as the digital curriculum in a virtual learning environment.</p>	<p>Creating and implementing a digital/micro-credential strategy for the organisation; aligning the assessment strategy with digital credentialing; designing a curriculum in a way that individual elements/modules can be issued as micro-credentials and that outside credentials can be recognized towards this curriculum; training colleagues in designing micro-credentials on the levels of micro and macro curriculum level and preparing the meta-data for the credential, supplying it from IT systems such as the digital curriculum in a virtual learning environment.</p>
<p><b>4.5 Recognition</b>Teacher is capable of judging information provided in learning credential and additional information to recognize skills and competences towards a larger credential.</p>	<p>Comparing documented achievements and assessment methods with the learning outcomes or competences to be recognised. Checking the validity of a credential. Converting the grade, documents and communicates the recognition decision. Applying the institutional guidelines and tools for recognition of formal and non-formal learning.</p>	<p>Training and consulting on the processes for recognition of formal and non-formal learning. Designing curricula to support recognition. Preparing and signing credit recognition agreements. Providing information to learners on open learning and how it can be recognised. Applying the institutional guidelines and tools for recognition of formal and non-formal learning. Sharing and discussing experiences and developments with the relevant community</p>	<p>Explaining, creating, implementing and continuously improving institutional procedures and tools for recognition, such as clearly defined and harmonized processes for recognition, recognition database, data standards and digital information exchange, information to learners about open learning and how it can be recognized, stakeholder involvement.</p>
<p><b>5. Empowering Learners</b></p>	<p>EXPLORING LEARNER-CENTRED STRATEGIE</p>	<p>STRATEGICALLY USING A RANGE OF TOOLS TO EMPOWER</p>	<p>INNOVATING LEARNER INVOLVEMENT</p>
<p><b>5.1 Accessibility and inclusion</b> 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.</p>	<p>Being aware of accessibility and inclusion issues.</p>	<p>Enabling accessibility and inclusion.</p>	<p>Innovating strategies for accessibility and inclusion.</p>

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<p><b>5.3 Actively engaging learners</b> 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, open learning to new, real-world contexts, involve learners themselves in hands-on activities, scientific investigation and complex problem solving, or in other ways that increase learners' active engagement and creative expression.</p>	Using digital technologies to engage learners.	Using digital technologies for learners' active engagement with the subject matter.	Innovating digital strategies for active learning.
<p><b>5.4 Agile Working</b> To empower learners in an interdisciplinary team to collaboratively develop a rapid prototype that creates value for the user using agile and iterative methods.</p>	Making basic use of digital technologies and agile methods to motivate students and prepare them to adapt to changes.	Actively employing agile methods by effectively embedding them into the learning and teaching processes. Using collaboration, communication and innovation tools and employing innovative practices such as using real-life challenges to boost creative thinking and preparedness of learners.	Developing innovative pedagogical techniques that create an environment focused on supporting students in developing adaptive skills and working collaboratively and iteratively in various multidisciplinary team constellations. Creating together with learners collaborative idea labs using emerging technologies such as virtual reality spaces.
<p><b>6. Facilitating Learners' Digital Competence</b></p>	ENCOURAGING LEARNERS TO USE DIGITAL TECHNOLOGIES	STRATEGICALLY FOSTERING LEARNERS' DIGITAL COMPETENCE	USING INNOVATIVE FORMATS TO FOSTER LEARNERS' DIGITAL COMPETENCE
<p><b>6.2 Digital communication &amp; collaboration</b> To incorporate learning activities, assignments and assessments which require learners to effectively and responsibly use digital technologies for communication, collaboration and civic participation.</p>	Encouraging learners to use digital technologies for communication and collaboration.	Strategically using a range of pedagogic strategies to foster learners' digital communication and collaboration.	Using innovative formats for fostering learners' digital communication and collaboration.
<p><b>6.3 Digital content creation</b> 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 licenses apply to digital content, how to reference sources and attribute licenses.</p>	Encouraging learners to use digital technologies for creating content.	Strategically using a range of pedagogic strategies to foster digital content creation by learners.	Using innovative formats for fostering digital content creation by learners.

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<p><b>6.4. Responsible use</b> 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.</p>	Encouraging learners to use digital technologies safely and responsibly.	Pedagogically supporting learners' use of digital technologies to ensure their wellbeing.	Developing innovative approaches to fostering learners' ability to use digital technologies for their own wellbeing.
<p><b>6.5 Digital problem solving</b> 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>	Encouraging learners to use digital technologies to solve problems.	Strategically using a range of pedagogic strategies to foster learners' digital problem solving.	Using innovative formats for fostering learners' digital problem solving.
<p><b>7. Health</b> To be prepared to prevent negative health impact (body, mind, soul) of Digital Technologies on learners and educators likewise, as well as provide adequate support and improvements</p>	Access and understand health information and observe learners' and own situation. Being able to interact with learner and apply criteria for intervention. Induce first level of assistance in case health issues related to online learning and digital technologies require.	Monitor own and learners' health situation using health information. Create appropriate formats for interaction on health, being able to offer scaled assistance in case of health issues arise. Evaluate organisational, pedagogical and technological options for minimizing health risks of online learning and digital technologies.	Explore own and learner's health situation with foresight, know how to intervene on a wide variety of health issues. Being able to create institution-wide strategies for prevention and intervention regarding health issues related to online learning and digital technologies.
<p><b>7.1 Dealing with Health Information and Health Conditions</b> To be aware of health impact and able to explore health-related information. To monitor own and learners' situation and apply evaluated information for framing meaningful use of digital technologies in learning processes</p>	Matching and evaluating one's own and learners' situation with available health-related information	Continuously monitoring one's own and learners' health conditions based on evaluated health information. Integrating evaluated perception of own and learners' health condition and situation into professional routines.	Anticipation of future impact of digital technologies on own and learners' health.
<p><b>7.2 Interaction and Intervention</b> To support healthy use of digital technology, and maintain positive interaction with learners or peers regarding health issues. To offer or seek support if evidence requires</p>	Positive communication with learners and colleagues regarding own or learners' health situation. Transfer and apply criteria for meaningful intervention to actual situation/condition of learner(s) or self.	Assessment and support of learners' healthy use of digital technology according to scaled criteria for intervention. Offer or seek personal or third party medical/psychological support if evidence requires.	Involvement of interaction for in situ rectification of own and learners' health condition/situation. Active, appropriate and immediate intervention if evidence requires, or support of third parties in their intervention for assisting learners with health issues deriving from use of digital technologies.
<p><b>7.3 Improvement of conditions and prevention</b> To explore, discuss and implement measures and improvements regarding learners' and own health. To foster own and learner's ability to employ digital technologies tech for sake of health</p>	Appraising, how basic options of monitoring, controlling and handling the use of digital technologies can create better conditions when using them.	Enhancing awareness of health impact by digital technologies. Using organisational, pedagogical and technological knowledge for implementation of measures preventing hazards and improving conditions of health impact by digital technologies.	Anticipation and conceptualisation of future health support, and creation of feasible solutions for improving physical & mental health situation/conditions of learners and educators.







## About the EdDico Project

With the advent of each new technology come predictions of fundamental changes in education. Yet few of these changes have been realized. Digital learning may indeed be the technology that breaks that pattern, but this will only come to pass if educators are empowered to take advantage of the technologies and methodologies available to them. The EdDiCo project aims at empowering individual educators to

- identify the potential technology holds to transform and improve the education they offer,
- identify the digital competences they would need to acquire to take advantage of those technologies and associated methodologies;
- find the educational resources necessary to acquire those competences.



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