



**teachersrise**

An initiative by  
Mobility and cooperation

# DigComp & DigCompEdu

**THE EU TOOLS FOR RECOGNITION & DEVELOPMENT  
OF THE DIGITAL COMPETENCES**

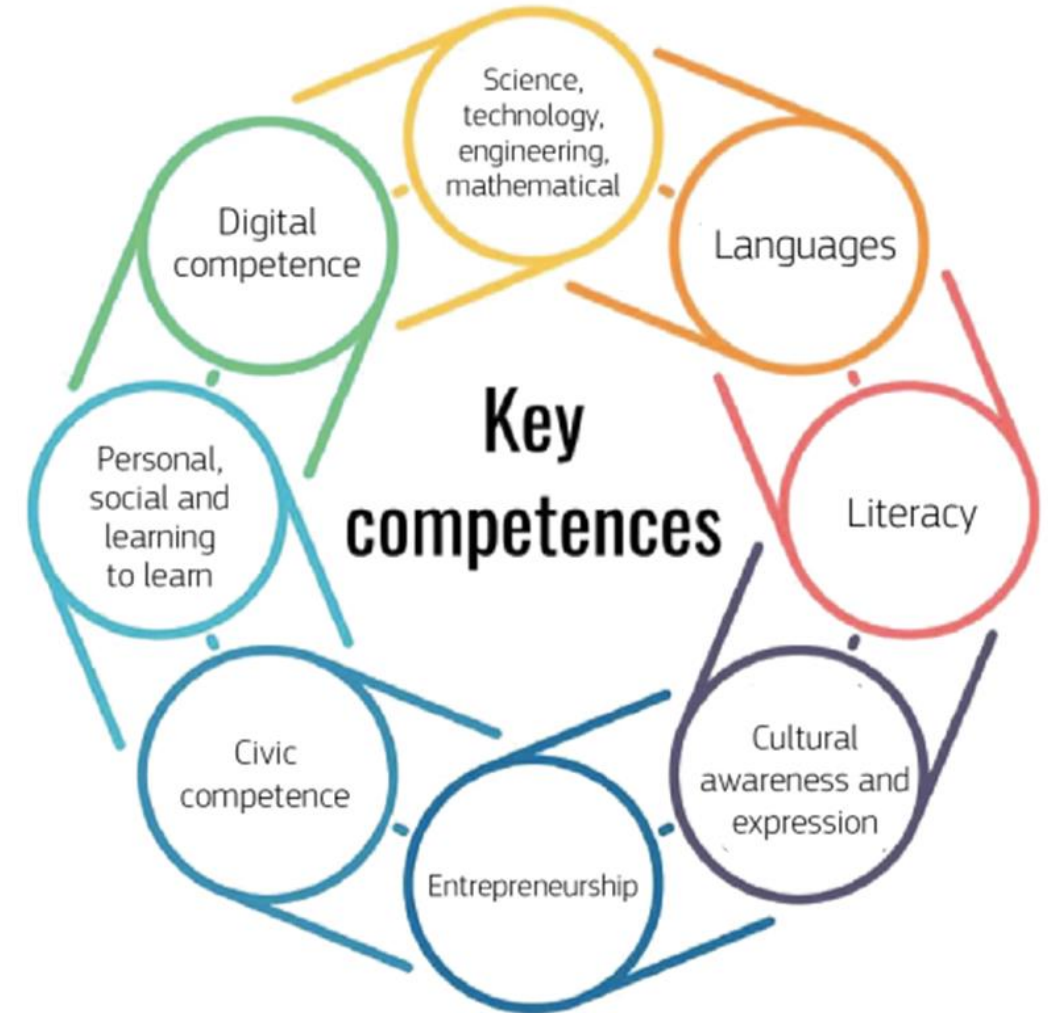
# INTRODUCTION

## Objectives of the webinar:

- ❖ To explore the **DIGCOMP** as an intrinsic part of the EU Lifelong learning framework and several EU strategic objectives;
- ❖ To discover **DIGCOMP** and **DIGCOMPEDU** frameworks in details
- ❖ To reflect on one's own level of digital competences
- ❖ To identify fields where the **DIGCOMPEDU** can be useful for teaching and education activities

# LIFELONG LEARNING & 8 KEY COMPETENCES

- **Lifelong learning** framework from 1970s till 1992 Lisbon Treaty
- **8 key competences** developed in 2006 and updated in 2018
- Identifies key competences essential to citizens for personal fulfillment, a healthy and sustainable lifestyle, employability, active citizenship, and social inclusion.
- The recommendation is **a reference tool** for educators and training stakeholders.
- It sets up **a common understanding** of competences.



# 8 COMPETENCES & 3 COMPONENTS



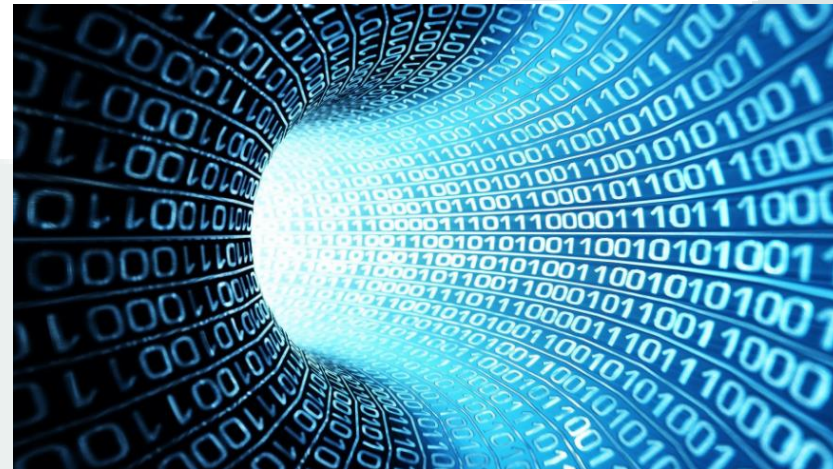
All key competences are a combination of:

- **Knowledge:** composed of the concepts, facts and figures, ideas and theories which are already established, and support the understanding of a certain area or subject.
- **Skills:** the ability to carry out processes and use the existing knowledge to achieve results.
- **Attitudes:** the disposition and mindset to act or react to ideas, persons or situations.

# The Digital competence in 8 key competence framework

- “Digital competence involves the confident, critical and responsible use of, and engagement with, digital technologies for learning, at work, and for participation in society.
- It includes information and data literacy, communication and collaboration, media literacy, digital content creation (including programming), safety (including digital well-being and competences related to cybersecurity), intellectual property related questions, problem solving and critical thinking.”

(Council Recommendation on Key Competences for Lifelong Learning, 22 May 2018, ST 9009 2018 INIT)



# EU policies and the digital competences



- **Lifelong learning framework** - 1992 Lisbon Treaty
- **The European Skills Agenda**, of 1 July 2020, supports digital skills for all for sustainable competitiveness, social fairness and resilience
- **The Digital Education Action Plan 2021 – 2027** with objectives of:
  - i) enhancing digital skills and competences for the digital transformation
  - ii) fostering the development of a high-performing digital education system.
- **The Digital Compass and the European Pillar of Social Rights Action Plan** set the ambitious policy targets of reaching a minimum of 80% of the population with basic digital skills and having 20 million ICT specialists by 2030

# Why the Digital has become a priority?

- Digital revolution – use of digital electronics in public and private sectors; digitalization of documents & information.
- Social Networks – communication, sharing and production of digital content
- COVID lockdown – smart working, digital collaboration & communication; digital teaching & learning; e-commerce & e-marketing.
- Games, devices – programming & robotics & artificial intelligence





# New Digital Professions

- Online Media Planner
- E-Commerce managers
- Data analytics experts and Big Data specialists
- IT engineers, coding, and cyber security experts
- Programmers of the Artificial Intelligence and robotic engineers
- Digital content writers and designers
- And many others





# All Professions vs Digital



# DigComp - The Digital Competence Framework for Citizens

- Developed by the European Commission as a reference framework to explain what it means **to be 'digitally competent'**.
- **DigComp is about people.** The framework does not focus on devices or software but seeks to support confident, critical, and responsible use of, and engagement with, digital technology by people.
- The framework offers a **comprehensive description** of the knowledge, skills, and attitudes that people need in 5 key areas.
- **DigComp** is a free, flexible reference framework that can be adapted to support the development and understanding of digital competence in any setting
- **Last version - DigComp 2.2 published on March 2022**



# DigComp is aimed:



1. **to support policy** to develop digital competence for a target population
2. **to assess digital competence** of an individual or a target group
3. to support the development and **digital competence of educators, trainers and teachers**
4. **to design teaching and learning experiences** for the individual learners to develop their digital competences
5. to identify, assess and certify **learning achievements** and digital competence development.

# Digital Competences Framework

## DigitCom 2.2

DigComp identifies the key components of digital competences in **5 areas**:

- Information and data literacy
- Communication and collaboration
- Digital content creation
- Safety
- Problem solving



# DigComp conceptual reference model

The diagram features a large, light gray graphic on the left side consisting of three concentric semi-circles, resembling a stylized 'C' or a target. To the right of this graphic, five colored rectangular boxes are arranged vertically, each representing a domain of digital competence. Each box has an arrow pointing to a corresponding list of sub-competences on the right. The domains and their sub-competences are: 1. Information and data literacy (yellow box, 3 sub-competences), 2. Communication and collaboration (blue box, 6 sub-competences), 3. Digital content creation (orange box, 4 sub-competences), 4. Safety (green box, 4 sub-competences), and 5. Problem solving (red box, 4 sub-competences).

## Information and data literacy

- 1.1. Browsing, searching and filtering data, information and digital content
- 1.2. Evaluating data, information and digital content
- 1.3. Managing data, information and digital content

## Communication and collaboration

- 2.1. Interacting through digital technologies
- 2.2. Sharing information and content through digital technologies
- 2.3. Engaging in citizenship through digital technologies
- 2.4. Collaborating through digital technologies
- 2.5. Netiquette
- 2.6. Managing digital identity

## Digital content creation

- 3.1. Developing digital content
- 3.2. Integrating and re-elaborating digital content
- 3.3. Copyright and licences
- 3.4. Programming

## Safety

- 4.1. Protecting devices
- 4.2. Protecting personal data and privacy
- 4.3. Protecting health and well-being
- 4.4. Protecting the environment

## Problem solving

- 5.1. Solving technical problems
- 5.2. Identifying needs and technological responses
- 5.3. Creatively using digital technologies
- 5.4. Identifying digital competence gaps



# 5 Proficiency levels of the competences

## 1. Foundation:

- At the basic level and with guidance
- At basic level with autonomy and with appropriate guidance where needed

## 2. Intermedium:

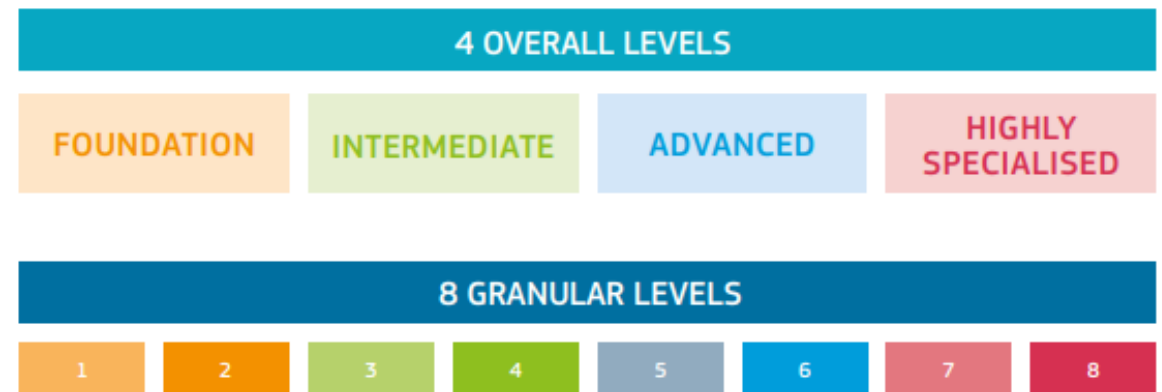
- On my own and solving straightforward problems;
- Independently and according to my own needs and solving well-defined non-routine problems

## 3. Advanced

- As well as guiding others
- At advanced level, according to my own needs and those of others and in complex context

## 4. Highly specialized

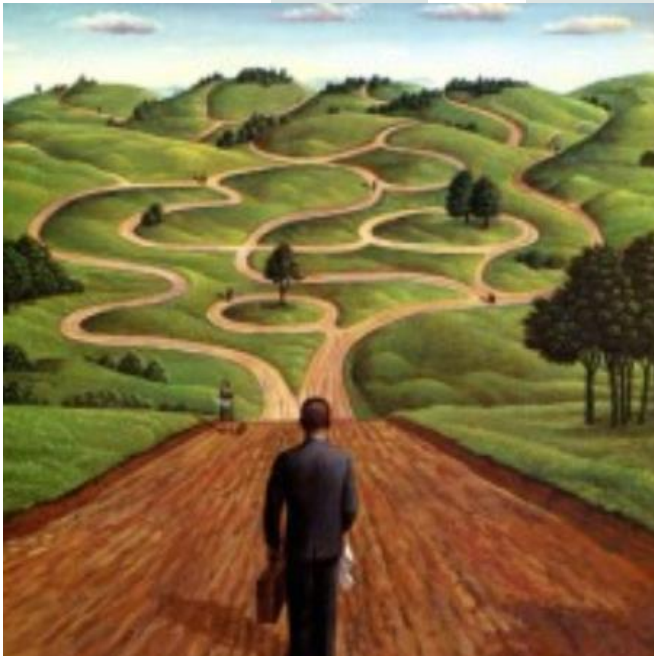
- At highly specialized level
- At the most advanced and specialized level





## Proficiency levels of competences are:

- A tool for evaluation/recognition of the learning outcomes or the existing level of the competence



- a learning path and thus setting the learning goals



LET'S EXPLORE EACH AREA OF THE DIGCOMP  
IN DETAILS!



# **DIGCOMP – CONTENT of each area**

## **1. Information and data literacy**

### **1.1 Browsing, searching and filtering data, information and digital content**

- To articulate information needs , to search for data, information and content in digital environments, to access them and to navigate between them.
- To create and update personal search strategies.

### **1.2 Evaluating data, information and digital content**

- To analyse, compare and critically evaluate the credibility and reliability of sources of data, information and digital content.
- To analyse, interpret and critically evaluate the data, information and digital content.

### **1.3 Managing data, information and digital content**

- To organise, store and retrieve data, information and content in digital environments.
- To organise and process them in a structured environment.

# Proficiency Levels:

## 1. The Information and data literacy

### 1.1. Browsing, searching and filtering data, information and digital content

FOUNDATION	1	At basic level and with guidance, I can:	<ul style="list-style-type: none"> <li>• <b>identify</b> my information needs, find data, information and content through a <b>simple</b> search in digital environments,</li> <li>• <b>find</b> how to access these data, information and content and navigate between them,</li> <li>• <b>identify simple</b> personal search strategies.</li> </ul>
	2	At basic level and with autonomy and appropriate guidance where needed, I can:	<ul style="list-style-type: none"> <li>• <b>identify</b> my information needs,</li> <li>• <b>find</b> data, information and content through a <b>simple</b> search in digital environments,</li> <li>• <b>find</b> how to access these data, information and content and navigate between them.</li> <li>• <b>identify simple</b> personal search strategies.</li> </ul>
INTERMEDIATE	3	On my own and solving straightforward problems, I can:	<ul style="list-style-type: none"> <li>• <b>explain</b> my information needs,</li> <li>• <b>perform well-defined and routine</b> searches to find data, information and content in digital environments,</li> <li>• <b>explain</b> how to access them and navigate between them,</li> <li>• <b>explain well-defined and routine</b> personal search strategies.</li> </ul>
	4	Independently, according to my own needs, and solving well-defined and non-routine problems, I can:	<ul style="list-style-type: none"> <li>• <b>illustrate</b> information needs,</li> <li>• <b>organise</b> the searches of data, information and content in digital environments,</li> <li>• <b>describe</b> how to access these data, information and content, and navigate between them,</li> <li>• <b>organise</b> personal search strategies.</li> </ul>
ADVANCED	5	As well as guiding others, I can:	<ul style="list-style-type: none"> <li>• <b>respond</b> to information needs,</li> <li>• <b>apply</b> searches to obtain data, information and content in digital environments,</li> <li>• <b>show</b> how to access these data, information and content and navigate between them.</li> <li>• <b>propose</b> personal search strategies.</li> </ul>
	6	At advanced level, according to my own needs and those of others, and in complex contexts, I can:	<ul style="list-style-type: none"> <li>• <b>assess</b> information needs,</li> <li>• <b>adapt</b> my searching strategy to find the <b>most appropriate</b> data, information and content in digital environments,</li> <li>• <b>explain</b> how to access these <b>most appropriate</b> data, information and content and navigate among them,</li> <li>• <b>vary</b> personal search strategies.</li> </ul>
HIGHLY SPECIALISED	7	At highly specialised level, I can:	<ul style="list-style-type: none"> <li>• <b>create solutions to complex problems with limited definition</b> that are related to browsing, searching and filtering of data, information and digital content,</li> <li>• <b>integrate</b> my knowledge <b>to contribute to professional practice and knowledge and guide others</b> in browsing, searching and filtering data, information and digital content.</li> </ul>
	8	At the most advanced and specialised level, I can:	<ul style="list-style-type: none"> <li>• <b>create solutions to solve complex problems with many interacting factors</b> that are related to browsing, searching and filtering data, information and digital content.</li> <li>• <b>propose new</b> ideas and processes to the field.</li> </ul>



## Proficiency Levels:

### 1. The Information and data literacy

#### 1.2 Evaluating data, information and digital content

FOUNDATION	1	At basic level and with guidance, I can:	<ul style="list-style-type: none"><li>• <b>detect</b> the credibility and reliability of common sources of data, information and their digital content.</li></ul>
	2	At basic level and with autonomy and appropriate guidance where needed, I can:	<ul style="list-style-type: none"><li>• <b>detect</b> the credibility and reliability of common sources of data, information and their digital content.</li></ul>
INTERMEDIATE	3	On my own and solving straightforward problems, I can:	<ul style="list-style-type: none"><li>• <b>perform</b> the analysis, comparison and evaluation of the credibility and reliability of <b>well-defined</b> sources of data, information and digital content.</li><li>• <b>perform</b> the analysis, interpretation and evaluation of <b>well-defined</b> data, information and digital content</li></ul>
	4	Independently, according to my own needs, and solving well-defined and non-routine problems, I can:	<ul style="list-style-type: none"><li>• <b>perform</b> the analysis, comparison and evaluation of sources of data, information and digital content.</li><li>• <b>perform</b> the analysis, interpretation and evaluation of data, information and digital content.</li></ul>
ADVANCED	5	As well as guiding others, I can:	<ul style="list-style-type: none"><li>• <b>carry out</b> an evaluation of the credibility and reliability of <b>different</b> sources of data, information and digital content.</li><li>• <b>carry out</b> an evaluation of <b>different</b> data, information and digital content.</li></ul>
	6	At advanced level, according to my own needs and those of others, and in complex contexts, I can:	<ul style="list-style-type: none"><li>• critically <b>assess</b> the credibility and reliability of sources of data, information and digital content.</li><li>• critically <b>assess</b> data, information and digital content.</li></ul>
HIGHLY SPECIALISED	7	At highly specialised level, I can:	<ul style="list-style-type: none"><li>• <b>create solutions to complex problems with limited definition</b> that are related to analysing and evaluating credible and reliable sources of data, information and content in digital environments.</li><li>• <b>integrate</b> my knowledge <b>to contribute to professional practices and knowledge</b> and to <b>guide others</b> in the analysis and evaluation of the credibility and reliability of data, information and digital content and their sources.</li></ul>
	8	At the most advanced and specialised level, I can:	<ul style="list-style-type: none"><li>• <b>create solutions to solve complex problems with many interacting factors</b> that are related to analysing and evaluating credible and reliable sources of data, information and content in digital environments.</li><li>• <b>propose new</b> ideas and processes to the field.</li></ul>

## Proficiency Levels:

### 1. The Information and data literacy

#### 1.3 Managing data, information and digital content

FOUNDATION	1	At basic level and with guidance, I can:	<ul style="list-style-type: none"><li>• <b>identify</b> how to organise, store and retrieve data, information and content in a <b>simple way</b> in digital environments.</li><li>• <b>recognise</b> where to organise them in a <b>simple way</b> in a structured environment.</li></ul>
	2	At basic level and with autonomy and appropriate guidance where needed, I can:	<ul style="list-style-type: none"><li>• <b>identify</b> how to organise, store and retrieve data, information and content in a <b>simple way</b> in digital environments.</li><li>• <b>recognise</b> where to organise them in a <b>simple way</b> in a structured environment.</li></ul>
INTERMEDIATE	3	On my own and solving straightforward problems, I can:	<ul style="list-style-type: none"><li>• <b>select</b> data, information and content in order to organise, store and retrieve them in a <b>routine way</b> in digital environments.</li><li>• <b>organise</b> them in a <b>routine way</b> in a structured environment.</li></ul>
	4	Independently, according to my own needs, and solving well-defined and non-routine problems, I can:	<ul style="list-style-type: none"><li>• <b>organise</b> information, data and content to be easily stored and retrieved.</li><li>• <b>organise</b> information, data and content in a structured environment.</li></ul>
ADVANCED	5	As well as guiding others, I can:	<ul style="list-style-type: none"><li>• <b>manipulate</b> information, data and content for their easier organisation, storage and retrieval.</li><li>• <b>carry out</b> their organisation and processing in a structured environment.</li></ul>
	6	At advanced level, according to my own needs and those of others, and in complex contexts, I can:	<ul style="list-style-type: none"><li>• <b>adapt</b> the management of information, data and content for <b>the most appropriate</b> easy retrieval and storage.</li><li>• <b>adapt</b> them to be organised and processed in <b>the most appropriate</b> structured environment.</li></ul>
HIGHLY SPECIALISED	7	At highly specialised level, I can:	<ul style="list-style-type: none"><li>• <b>create solutions to complex problems with limited definition</b> that are related to managing data, information, and content for their organisation, storage and retrieval in a structured digital environment.</li><li>• <b>integrate</b> my knowledge <b>to contribute to professional practices and knowledge and to guide others</b> in managing data, information and digital content in a structured digital environment.</li></ul>
	8	At the most advanced and specialised level, I can:	<ul style="list-style-type: none"><li>• <b>create solutions to solve complex problems with many interacting factors</b> that are related to managing data, information, and content for their organisation, storage and retrieval in a structured digital environment.</li><li>• <b>propose new</b> ideas and processes to the field.</li></ul>



# 1. Information and data literacy

	Browsing, searching and filtering data, information and digital content	Evaluating data, information and digital content	Managing data, information and digital content
KNOWLEDGE	<ul style="list-style-type: none"> <li>- Knows that some online content in search result may not be open access or freely available and may require a fee or signing up in order to access it.</li> <li>- Aware that online content that is available to users at no monetary cost is often paid for by advertising or by selling the user's data</li> </ul>	<ul style="list-style-type: none"> <li>- Aware that online environments contain all types of information and content including misinformation and disinformation, and even if a topic is widely reported it does not necessarily mean it is accurate.</li> <li>- Understands the difference between disinformation and misinformation</li> </ul>	<ul style="list-style-type: none"> <li>- Aware that many applications on the internet and mobile phones collect and process data that the user access to monitor their activities online</li> <li>- Aware that for data to be processed by a program, they have to be first properly digitised</li> </ul>
SKILLS	<ul style="list-style-type: none"> <li>- Can make use of information presented as hyperlinks, in non-textual form and in dynamic representations.</li> <li>- Develops effective search methods for personal purposes and professional purposes</li> </ul>	<ul style="list-style-type: none"> <li>- Knows how to analyse and critically evaluate search results and social media activity streams, to identify their origins, to distinguish fact-reporting from opinion.</li> <li>- Knows how to find the author or the source of the information, to verify whether it is credible</li> </ul>	<ul style="list-style-type: none"> <li>- Knows how to collect digital data using basic tools such as online forms, and present them in an accessible way</li> <li>- Can apply basic statistical procedures to data in a structured environment to produce graphs and other visualisations</li> </ul>
ATTITUDES	<ul style="list-style-type: none"> <li>- Intentionally avoids distractions and aims to avoid information overload when accessing and navigating information, data and content.</li> <li>- Values tools designed to protect search privacy and other rights of users</li> </ul>	<ul style="list-style-type: none"> <li>- Inclined to ask critical questions in order to evaluate the quality of online information.</li> <li>- Willing to fact-check a piece of information and assess its accuracy, reliability and authority, preferring primary sources where possible.</li> </ul>	<p>Considers transparency when manipulating and presenting data to ensure reliability</p>

# SELF REFLECTION

**Regarding The Information and data literacy - Searching, evaluating and managing data and information...**

- How competent do you feel?
- What are your knowledges, skills and attitudes in this?
- What are you strong and week points?



# Digital Competences Framework - 5 areas

## 2. Communication and collaboration

### 2.1 Interacting through digital technologies

To interact through a variety of digital technologies and to understand appropriate digital communication means for a given context.

### 2.2 Sharing through digital technologies

To share data, information and digital content with others through appropriate digital technologies. To act as an intermediary, to know about referencing and attribution practices.

### 2.3 Engaging in citizenship through digital technologies

To participate in society through the use of public and private digital services. To seek opportunities for self-empowerment and for participatory citizenship through appropriate digital technologies.

### 2.4 Collaborating through digital technologies

To use digital tools and technologies for collaborative processes, and for co-construction and co-creation of resources and knowledge.

### 2.5 Netiquette

To be aware of behavioural norms and know-how while using digital technologies and interacting in digital environments. To adapt communication strategies to the specific audience and to be aware of cultural and generational diversity in digital environments.

### 2.6 Managing digital identity

To create and manage one or multiple digital identities, to be able to protect one's own reputation, to deal with the data that one produces through several digital tools, environments and services.

# Digital Competences Framework - 5 areas

## 3. Digital content creation:

### 3.1 Developing digital content

To create and edit digital content in different formats, to express oneself through digital means.

### 3.2 Integrating and re-elaborating digital content

To modify, refine, improve and integrate information and content into an existing body of knowledge to create new, original and relevant content and knowledge.

### 3.3 Copyright and licences

To understand how copyright and licences apply to data, information and digital content.

### 3.4 Programming

To plan and develop a sequence of understandable instructions for a computing system to solve a given problem or perform a specific task.

# Digital Competences Framework - 5 areas

## 4. Safety:

### 4.1 Protecting devices

- To protect devices and digital content, and to understand risks and threats in digital environments.
- To know about safety and security measures and to have due regard to reliability and privacy.

### 4.2 Protecting personal data and privacy

- To protect personal data and privacy in digital environments.
- To understand how to use and share personally identifiable information while being able to protect oneself and others from damages.
- To understand that digital services use a “Privacy policy” to inform how personal data is used.

### 4.3 Protecting health and well-being

- To be able to avoid health-risks and threats to physical and psychological well-being while using digital technologies.
- To be able to protect oneself and others from possible dangers in digital environments (e.g. cyber bullying).
- To be aware of digital technologies for social well-being and social inclusion.

### 4.4 Protecting the environment

To be aware of the environmental impact of digital technologies and their use.

# Digital Competences Framework - 5 areas

## 5. Problem solving:

### 5.1 Solving technical problems

- To identify technical problems when operating devices and using digital environments, and to solve them (from trouble-shooting to solving more complex problems).

### 5.2 Identifying needs and technological responses

- To assess needs and to identify, evaluate, select and use digital tools and possible technological responses to solve them.
- To adjust and customise digital environments to personal needs (e.g. accessibility).

### 5.3 Creatively using digital technologies

- To use digital tools and technologies to create knowledge and to innovate processes and products.
- To engage individually and collectively in cognitive processing to understand and resolve conceptual problems and problem situations in digital environments.

### 5.4 Identifying digital competence gaps

- To understand where one's own digital competence needs to be improved or updated.
- To be able to support others with their digital competence development.
- To seek opportunities for self-development and to keep up-to-date with the digital evolution.



# SELF REFLECTION

How competent do you feel regarding

- the communication and collaboration online
- the creation of a digital content...
- the safety issues in the digital dimension
- the problem solving

What are your knowledges, skills and attitudes in this?

What would you like to develop more, to improve?



# DEVELOPMENT OF COMPETENCES

Competitive Europe with highly competent citizens - professionals is one of EU objectives.

**DigCom is one of the tools to promote significant development of the Digital competences**

**How do you develop competences?**

The Digital Education Action Plan (2021-2027) is a renewed European Union (EU) policy initiative that sets out a common vision of high-quality, inclusive and accessible digital education in Europe

**Priority 1: Fostering the development of a high-performing digital education ecosystem**

**Priority 2: Enhancing digital skills and competences for the digital**

## Interesting data:

In 2018 Organisation for Economic Co-operation and Development (OECD) study found that  
**on average less than 40% of educators** across the  
**EU felt ready to use digital technologies in teaching**  
(with divergences between EU Member States)

# European Framework for the Digital Competence of Educators: DigCompEdu

- **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.
- **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.

# DigCompEdu

The European Framework for the Digital Competence of Educators (DigCompEdu) responds to the growing awareness among many European Member States that educators need a set of digital competences specific to their profession

The DigCompEdu framework is **not intended to undermine national, regional and local efforts** to capture educators' digital competence. On the contrary, the diversity of approaches in different Member States contributed to a productive and ongoing debate on the topic.

The framework aims to provide a common ground for this debate, with a common language and logic as a starting point.

The DigCompEdu framework is **the result of a series of discussions and deliberations** with experts and practitioners.



# 6 areas of the DigCompEdu framework

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**

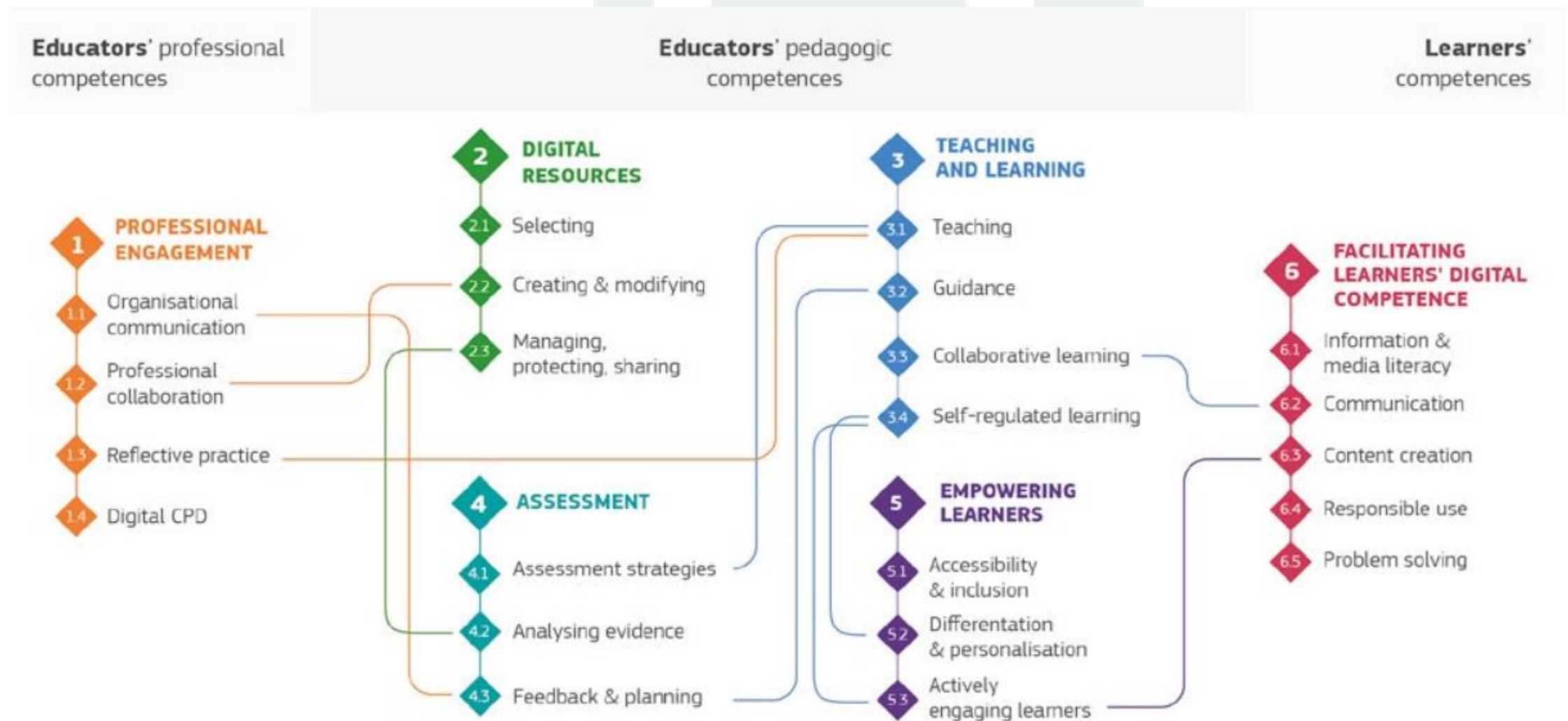
Using digital technologies and strategies to enhance assessment.

## **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 DigCompEdu Framework proposes 22 elementary competences organised in 6 areas that are interconnected among them

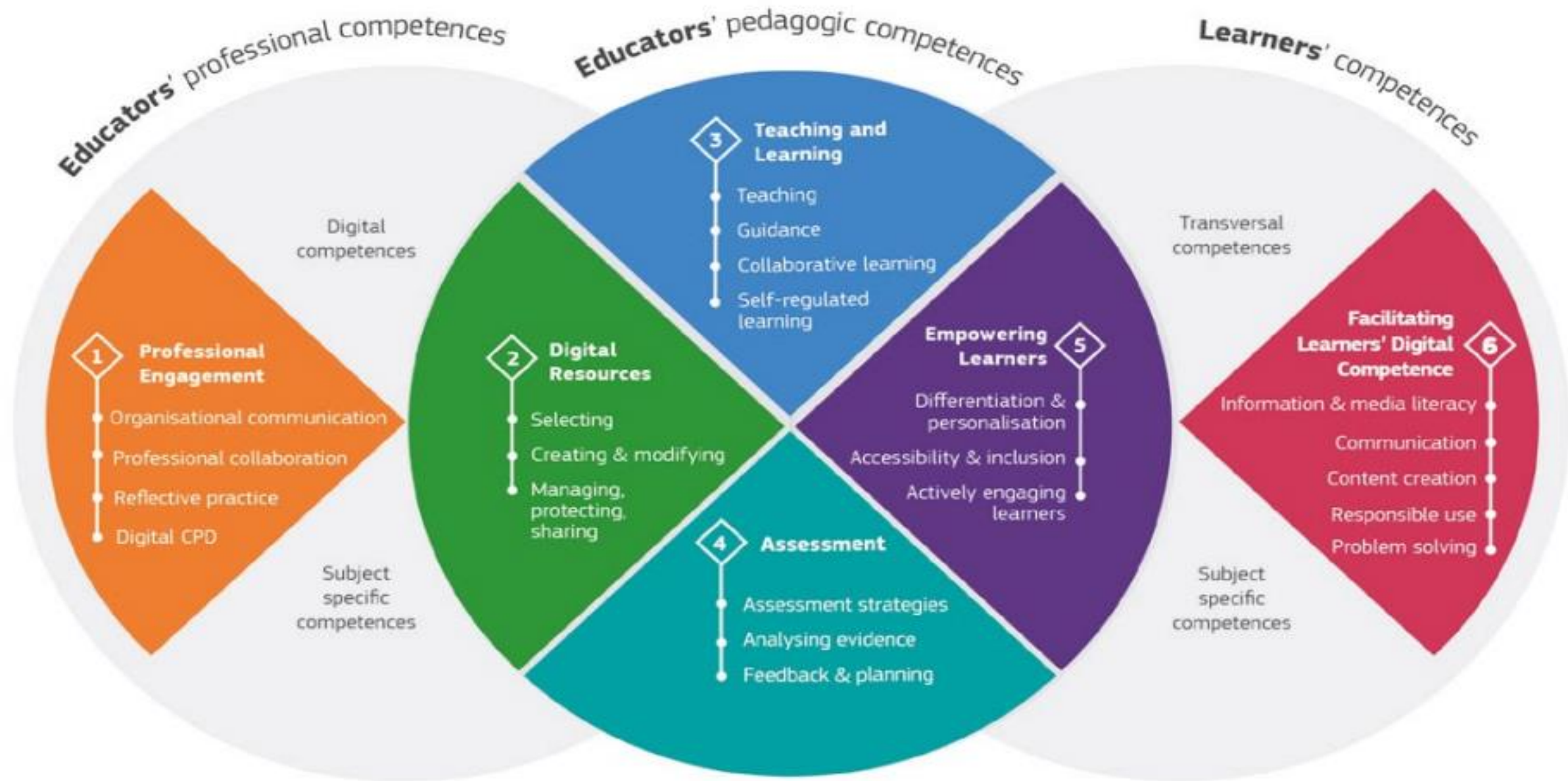


FIGURE 4: SYNTHESIS OF THE DIGCOMPEDU FRAMEWORK

# The DigCompEdu Framework

## Professional Engagement



### **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.



### **Professional collaboration**

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



### **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.



### **Digital Continuous Professional Development (CPD)**

To use digital sources and resources for continuous professional development.



# The DigCompEdu Framework

## Digital Resources



### 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.



### 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.



### 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.

# The DigCompEdu Framework

## Teaching and Learning



### 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 strategies. To experiment with and develop new formats and pedagogical methods for instruction.



### 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.



### 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.



### Self-regulated learning

To use digital technologies to support learners' self-regulated learning, 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.



# The DigCompEdu Framework

## Assessment



### Assessment strategies

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



### 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.



### Analysing evidence

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

# The DigCompEdu Framework

## Empowering Learners



### 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.



### 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.



### 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.

## Facilitating Learners' Digital Competence



### 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.



### Digital communication and collaboration

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



### 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.



### 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.



### 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.

# The DigCompEdu Framework

# The DigCompEdu Framework

A progression model to help educators assess and develop their digital competence.

**Six different stages** through which an educator's digital competence typically develops:

- **Newcomer (A1)** and **Explorer (A2)**, educators assimilate new information and develop basic digital practices;
- **Integrator (B1)** and **Expert (B2)**, they apply, further expand and structure on their digital practices;
- at the highest stages, **Leader (C1)** and **Pioneer (C2)**, they pass on their knowledge, critique existing practice and develop new practices.

	PROFESSIONAL ENGAGEMENT	DIGITAL RESOURCES	TEACHING AND LEARNING	ASSESSMENT	EMPOWERING LEARNERS	FACILITATING LEARNERS' DIGITAL COMPETENCE
<b>Pioneer</b>	INNOVATING PROFESSIONAL PRACTICE	PROMOTING THE USE OF DIGITAL RESOURCES	INNOVATING TEACHING	INNOVATING ASSESSMENT	INNOVATING LEARNER INVOLVEMENT	USING INNOVATIVE FORMATS
<b>Leader</b>	DISCUSSING AND RENEWING PROFESSIONAL PRACTICE	COMPREHENSIVELY USING ADVANCED STRATEGIES & RESOURCES	STRATEGICALLY & PURPOSEFULLY RENEWING TEACHING PRACTICE	CRITICALLY REFLECTING ON DIGITAL ASSESSMENT STRATEGIES	HOLISTICALLY EMPOWERING LEARNERS	COMPREHENSIVELY & CRITICALLY FOSTERING LEARNERS' DIGITAL COMPETENCE
<b>Expert</b>	ENHANCING PROFESSIONAL PRACTICE	STRATEGICALLY USING INTERACTIVE RESOURCES	ENHANCING TEACHING & LEARNING ACTIVITIES	STRATEGIC AND EFFECTIVE USE OF DIGITAL ASSESSMENT	STRATEGICALLY USING A RANGE OF TOOLS TO EMPOWER	STRATEGICALLY FOSTERING LEARNERS' DIGITAL COMPETENCE
<b>Integrator</b>	EXPANDING PROFESSIONAL PRACTICE	FITTING DIGITAL RESOURCES TO THE LEARNING CONTEXT	MEANINGFULLY INTEGRATING DIGITAL TECHNOLOGIES	ENHANCING TRADITIONAL ASSESSMENT APPROACHES	ADDRESSING LEARNER EMPOWERMENT	IMPLEMENTING ACTIVITIES TO FOSTER LEARNERS' DIGITAL COMPETENCE
<b>Explorer</b>	EXPLORING DIGITAL OPTIONS	EXPLORING DIGITAL RESOURCES	EXPLORING DIGITAL TEACHING & LEARNING STRATEGIES	EXPLORING DIGITAL ASSESSMENT STRATEGIES	EXPLORING LEARNER-CENTRED STRATEGIES	ENCOURAGING LEARNERS TO USE DIGITAL TECHNOLOGIES
<b>Newcomer</b>	AWARENESS; UNCERTAINTY; BASIC USE					

# DigCompEdu - Progression model

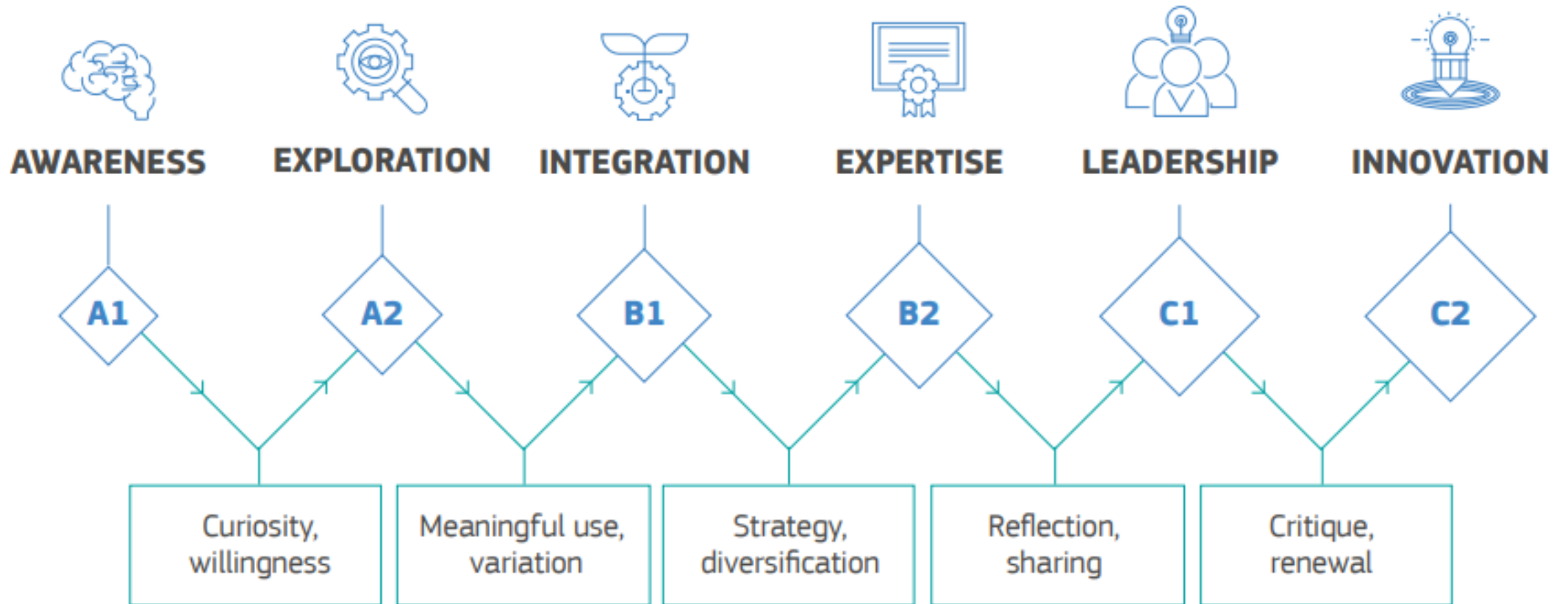


FIGURE 5: DIGCOMPEDU PROGRESSION MODEL



# SELF-REFLECTION



**How good are your Digital Competences as a teacher/educator?**

How often are you collaborating professionally through digital technologies?

Are you using digital technologies in order to enhance students knowledge and to plan and monitor their learning?

How about selecting and using digital resources in teaching? How good are you in that?

# PRACTICAL EXERCISES

**In the next weeks please:**

1. Create a lesson using an online resource related to your subject
2. Ask students to collect data and different type of digital materials on a topic related to your subject
3. Give a task/a collaborative work in small groups with collected materials in order to produce digital content on the given topic.
4. Dedicate a reflection with students also by analysing resources used, their relevance, reliability.
5. Please give an assessment of the produced results using the digital technologies.



# Resources for continuing learning on the DigCom & DigCompEdu

- [https://joint-research-centre.ec.europa.eu/digcompedu\\_en](https://joint-research-centre.ec.europa.eu/digcompedu_en)
- <https://ec.europa.eu/social/main.jsp?catId=89&furtherNews=yes&newsId=10193&langId=en>
- [https://commission.europa.eu/strategy-and-policy/priorities-2019-2024/europe-fit-digital-age\\_en](https://commission.europa.eu/strategy-and-policy/priorities-2019-2024/europe-fit-digital-age_en)
- <https://op.europa.eu/en/publication-detail/-/publication/297a33c8-a1f3-11e9-9d01-01aa75ed71a1/language-en>