

Digital Competence for IR 4.0: Implications for Teaching and Learning

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What is digital competence?*

- It refers to the **confident** and **critical** usage of the **full range** of digital technologies for information, communication, and basic problem-solving in all aspects of life.
- It helps people master other key competences such as communication, language skills, or basic skills in mathematics and science.

*EU publication

What are digital technologies?*

- They are electronic tools, systems, devices, and resources that **generate, store, or process data**. Examples include social media, online games, multimedia and mobile phones

Five Areas of Digital Competence*

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

Digital Competences*

- 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

Communication and Collaboration*

- Interacting through digital technologies
- Sharing through digital technologies
- Engaging in citizenship through digital technologies
- Collaborating through digital technologies
- Netiquette
- Managing digital identity

Developing Digital Content*

- Creating digital content
- Integrating and re-elaborating digital content
- Copyright and licenses
- Programming

Safety*

- Protecting devices
- Protecting personal data and privacy
- Protecting health and well-being
- Protecting the environment

Problem Solving*

- Solving technical problems
- Identifying needs and technological responses
- Creatively using digital technologies
- Identifying digital competence gaps

Implications to Teaching and Learning

- Use problem-based learning
- Promote computational thinking in different school subjects
- Engage in lesson study to develop lessons that integrate ICT in teaching and learning (can also be done online)
- Learn with students
- Emphasize values in using digital technologies

Thank you.