

INTEGRATING DIGITAL TECHNOLOGY IN THE TEACHING-LEARNING PROCESS

Mihai Iacob, Institute of Educational Sciences, Bucharest





- 1. EU research and policy
- 2. Approaches in partner countries
- 3. Practical steps



DIGITAL ACTION PLAN



Making better use of digital technology for teaching and learning (Action 1 to 3)

Action 1 - Connectivity in Schools

Action 2 - SELFIE self-reflection tool & mentoring scheme for schools

Action 3 - Digitally-Signed Qualifications

Developing digital competences and skills (Action 4 to 8)

<u>Action 4 - Higher Education Hub</u>

<u>Action 5 - Open Science Skills</u>

Action 6 - EU Code Week in schools

<u>Action 7 - Cybersecurity in Education</u>

Action 8 - Training in digital and entrepreneurial skills for girls

Improving education through better data analysis and foresight (Action 9 to 11)

<u>Action 9 - Studies on ICT in education</u>

Action 10 - Artificial Intelligence and analytics

Action 11 - Strategic foresight



DIGCOMPEDU











01 Professional Engagement

- 02 Digital Resources
- 03 Teaching and Learning
- 04 Assessment
- **05 Empowering Learners**
- 06 Facilitating Learners' Digital Competence





Figure 1: Overview of the DigCompEdu framework

BENEFICIERIES



Digital Natives or Naïve Experts? Exploring how Norwegian children (aged 9-15) understand the Internet.

EU Kids Online 2018

Digital Natives or Naïve Experts?

November 2018

There is a gap between the extent to which children are familiar with concepts that relate to the Internet, and their ability to implement the practical skills these concepts refer to. They also lack a holistic understanding of the risks and opportunities that may be associated with their actions.

(Ní Bhroin & Rehder, 2018)



SURVEY OF POLICY AND PRACTICES











- 2. Developing an ICT based education model
- 3. Dimensions of ICT integration in education
- 4. Good practices in specific areas

Communication and literacy learning with ICT

Virtual labs

Scientific exploration through virtual environments

Virtual Reality in the classroom

Posing and solving problems in the App-Era

Virtual communities

- 5. Teacher training
- 6. Approaches to the evaluation of ICT integration in schools
- 7. Recommendations
- 8. Final considerations



103 - Practical Guide for Schools. Quality Framework for Integrating ICT in the Teaching-**Learning Process**

Transnational Report



RECOMMENDATIONS



Policy

Updating legislation to account for the development of digital technologies.

Clear and transparent mechanisms for investment.

Creating a framework for schools to aim for and benchmark themselves against.

Schools

ICT should be used under open management
Integration should be contextualized to local realities
ICT equipment is only a prerequisite for contemporary education, not a guarantee of success.

Classroom

Emphasis should be put on the real-life use of ICT, critical thinking, problem solving, learning to learn, communication and collaboration, and digital citizenship.

Using open source software and open educational resources whenever available



CRITERIA FOR ASSESSING SCHOOL LEVEL INTEGRATION OF ICT









- Availability of resources
- School development strategy
- Openness towards the community
- Recognition for the use of ICT
- Continuous professional development
- Integration of ICT throughout the teaching process
- Promoting safety and security in the use of ICT

MEANINGFUL TEACHING AND LEARNING









- 1 Documentation
- 2 Interaction
- 3 Data bases
- 4 The virtual tours

Tips

- Search and download materials for students
- Invent home assignments that require digital channels
- Communicate with students by means of apps (e.g. WhatsApp)
- Post on the various class blogs
- Encourage students to design neat presentations
- Extensively use YouTube for entry points
- Never use Apps just because! Put them to work meaningfully.
- Whatever works for you and your students is best practice.



Tools for the integration of ICT in schools



- Planning tools
- Map of resources
- Training opportunities
- Communities of practice
- Involving students in the design of learning
- Local partnerships
- Sharing with the global society





These are exciting times to be a teacher! Thank you for your attention!

Mihai lacob mihai.iacob@ise.ro

