# Tarptautinės skaitmeninės transformacijos kryptys ir praktika

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### **European Education Area**

Quality education and training for all



Focus topics. \*

Education levels \* What's new? \*

Resources and tools ▼

Funding:

You are here: European Education Area / Focus topics / Digital education

#### Digital education

The EU is promoting the development of a high-performing. European digital education ecosystem and is seeking to enhance citizens' competences and skills for the digital transition.

Learn about digital education



### What is the EU doing on digital education?





#### European Digital Education Hub

The open online collaborative community for digital education stakeholders in Europe and beyond.

Join the community of the Hub







Briuselis, 2020 09 30 COM(2020) 624 final

#### KOMISIJOS KOMUNIKATAS EUROPOS PARLAMENTUI, TARYBAI, EUROPOS EKONOMIKOS IR SOCIALINIŲ REIKALŲ KOMITETUI IR REGIONŲ KOMITETUI

2021–2027 m. skaitmeninio švietimo veiksmų planas Švietimo ir mokymo pritaikymas prie skaitmeninio amžiaus

(SWD(2020) 209 final)

# Figure 2 – Priorities of the updated Digital Education Action Plan (2021-2027)

PRIORITY 1 – Fostering the development of a high-performing digital education ecosystem

PRIORITY 2 – Enhancing digital skills and competences for the digital transformation



Launch a strategic dialogue with member states to facilitate successful digital education



Develop common guidelines to foster digital literacy and fight disinformation



Make recommendations for online/distance learning in primary and secondary education



Include AI and digital skills in the European Digital Competence Framework; support the development of artificial intelligence learning resources for education and training providers



Develop a European Digital Education Content Framework and check the feasibility of a European exchange platform to share certified online resources and link existing platforms



Develop a **European Digital Skills Certificate** recognised by governments, employers and other stakeholders across Europe



Launch a Connectivity4Schools initiative and encourage member states' uptake of EU support for broadband, internet access and digital tools such as SELFIE for Teachers



Make recommendations on improving digital skills provision and introduce an EU target for student digital competence



Develop ethical guidelines on artificial intelligence (AI) and data usage in teaching and learning



Promote advanced digital skills development; scale up Digital Opportunity traineeships and encourage female participation in science, technology, engineering and mathematics



Create a new European Digital Education Hub to link national and regional digital education initiatives and stakeholders

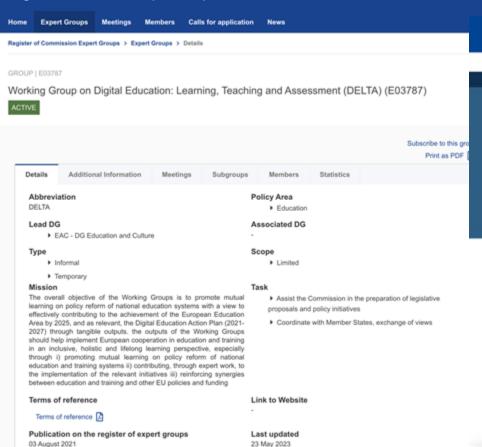


Contact

EAC-WG-DELTA@ec.europa.eu



### Register of Commission Expert Groups and Other Similar Entities





### Free tools for schools and teachers









### Based on DigCompOrg

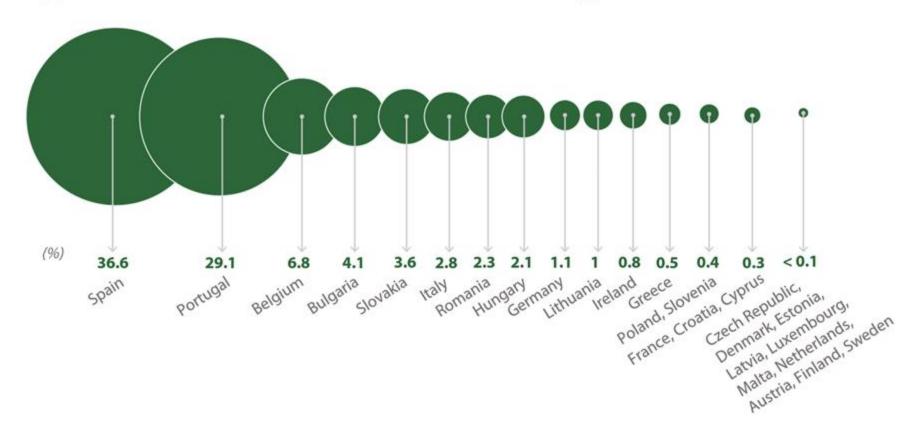
- Lyderystės ir valdymo praktika
- 2. Mokymo ir mokymosi praktika
- 3. Profesinis tobulėjimas/ raida
- 4. Vertinimo praktika
- 5. Skaitmeninis ugdymo turinys
- 6. Bendradarbiavimas ir tinklaveika
- 7. Infrastruktūra
- Sektoriui specifinės sritys

A framework transformed into an intervention tool





Figure 6 – Share of students and teachers using SELFIE in member states



Source: ECA based on Commission and Eurostat data.

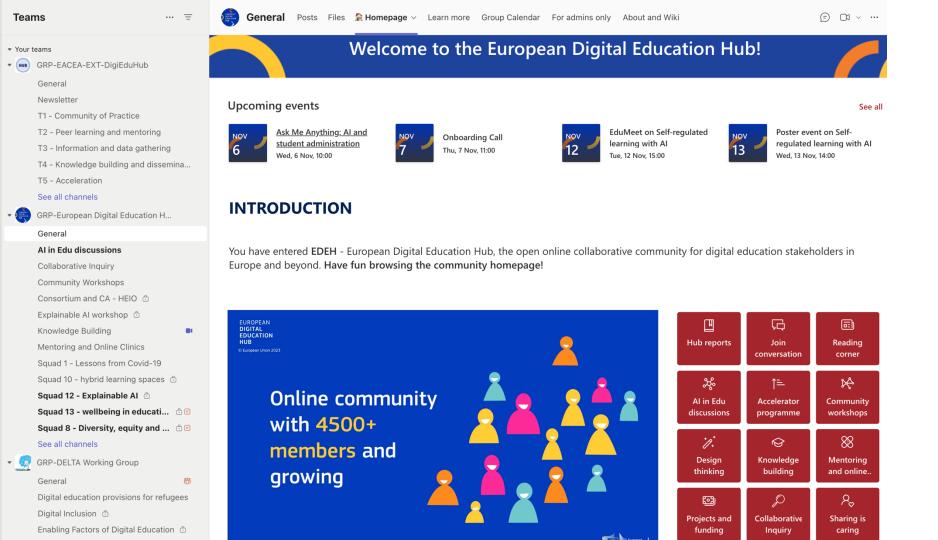


# **Join European Digital Education Hub**

Mentorship and Clinics Knowledge Building Activities Accelerator Reading Corner

... and much more!





### **Knowledge Building – Al in Education**

### Knowledge Building – Immersive technologies

Upcoming Event - Register Now! - "Supporting teachers on AI application in education" - Monday October 21 at 11:00 (CET)

Register Now! - "Immersive technologies for simulation and experimentation in education: why should we?" - Wednesday October 02 at 15:00 (CET)

👉 We are pleased to invite you to a new Knowledge Building Event on Monday October 21 on "Supporting application in education" in the Knowledge Building Channel.

👺 The aim of the event is to focus on various ways artificial intelligence can be integrated into educational pra support teachers in using AI technologies effectively within their teaching practices. We will explore different pe in the classroom, as well as the impact of its implementation on both teachers and students. A concise approac

### Knowledge Building Event - Well-being

Register Now! - "Support your learners' well-being in digital education" - Wednesday September 11 at 14:00 (CET)

er We are pleased to invite you to a new Knowledge Building Event on Wednesday September 11 on " Support your learners' well-being in digital education" in the Knowledge Building Channel.

The aim of the event is to discuss the issue of well-being in a digital learning environment with the education community, share experience and know-how, raise awareness about the importance of well-being, and explore what can be done to improve and enhance students' well-being in digital learning.

🔓 Join our experts: Sandra Kučina Softić, Leigh-Anne.Perryman (Svečias), Miska Noponen (Svečias), Lucija Vejmelka (Svečias)

Support your learners well-being i... EDEH Agenda - KBA September 11... GRP-EACext-DigitalEducationHub > Kno.. GRP-EACext-DigitalEducationHub > Kno...

# Knowledge Building – Hybrid learning spaces

Register Now! - "Learning in in-between spaces; Designing hybrid education for the 21st Century learner" - Thursday November 14 at 14:00 (CET)

🖣 We are pleased to invite you to a new Knowledge Building Event on Thursday November 14 on "Learning in in-between spaces: Designing hybrid education for the 21st Century learner" in the Knowledge Building Channel.

👺 The aim of the event is to explore how hybrid learning spaces, which bring together on-site and online learners, can be effectively designed and facilitated to assist 21st Century learners with the acquisition of critical skills, competences and knowledge. The event will share practical examples of hybrid education, use of digital tools and platforms and be a catalyst for debate on the future of inbetween learning spaces.

#### see more





EDEH Agenda - KBA November 14...

GRP-EACext-DigitalEducationHub > Kno...

### **Knowledge Building Chanel**

Synchronous events

Teams

Your teams

General

Newslette

T5 - Acceleration

See all channels

Al in Edu discussions Collaborative Inquiry

Community Workshops

Knowledge Building Mentoring and Online Clinics Squad 13 - wellbeing in education 🙃

See all channels

Consortium and CA - HEIO (3)

Squad 8 - Diversity, equity and inclu... 🗅

Workshop Programme Committee 🙃

GRP-EACEA-EXT-DigiEduHub

T1 - Community of Practice

T2 - Peer learning and mentoring

T3 - Information and data gathering T4 - Knowledge building and dissemin...

GRP-European Digital Education H...

- Asynchronous communication
- Event resources and reports

**Knowledge Building** 

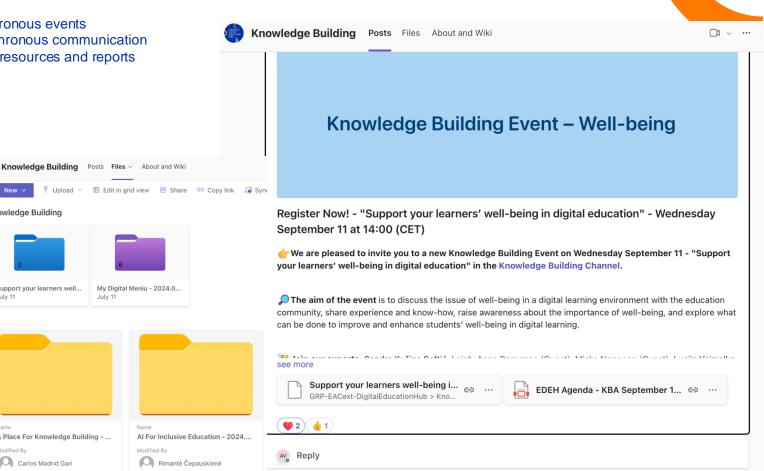
Support your learners well..

A Place For Knowledge Building - ...

Carlos Madrid Gari

July 11

July 11





# **Knowledge Building Activities**

**Digital** competences of

Digital competences of organisations

educators

Virtual Learning **Environments** 

Al

**Digital** well-being

**MOOCs** 

Sustainability

EdTech

Open

Educational

**Digital** 

Resources

Changemakers

Micro-

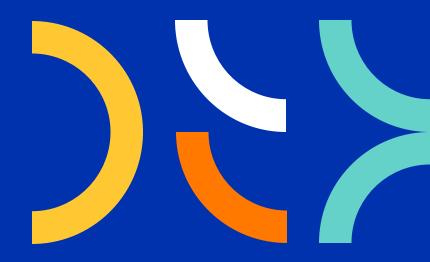
credentials

DIGITAL **EDUCATION** HUB

**EUROPEAN** 

Gender Digital Gap

28 events already happened More than 1600 participants More than 90 experts invited





### Teachers' competences

Briefing report No. 1 by the European Digital Education Nub's squad on artificial intelligence in education EUROPEAN DIGITAL EDUCATION HUB



How to Support Teachers to Use Al in Teaching

Briefing report No. 2 by the European Digital Education Hob's squad on artificial Intelligence in education EUROPEAN DIGITAL EDUCATION HUB



Teaching with AI – Assessment, Feedback and Personalisation

Briefing report No. 7

by the European Digital Education Hub's squad on artificial Intelligence in education

EUROPEAN DIGITAL EDUCATION HUB Tangen of be

Teaching for AI entails competences for all citizens, including teachers and learners, to engage confidently, critically and safely with AI systems to provide them with the necessary knowledge, skills and attitudes to live in a world surrounded and shaped by AI.

Teaching with AI focuses on how AI systems can be used for educational goals, including using pedagogical judgement on when to use them, but also knowledge about the functioning of underlying algorithms, pedagogical models and data.

**Teaching about AI** is the more technical part, focused on training students in the fundamentals of AI. It is usually part of AI literacy which should comprise both the technological and the human dimensions of AI organised according to the student's age. Knowledge about AI basics is key for preparing students for the labour market, independently of their future careers.

### Use Scenarios & Practical Examples of AI Use in Education

Briefing report No. 3 by the European Digital Education Hub's squad on artificial intelligence in education EUROPEAN DIGITAL EDUCATION HUB

### EN 2023

11

Special report

### EU support for the digitalisation of schools

Significant investments, but a lack of strategic focus in the use of EU financing by member states







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### Competences for teaching with AI

Area 1: Professional Engagement

Area 2: Digital resources

Area 3: Teaching and Learning

Area 4: Assessment

Area 5: Empowering Learners

Area 6: Facilitating learners' digital



Competence areas in DigComp

### Competences for teaching for Al

- 1. Information and data literacy
- 2. Communication and collaboration
- 3. Digital content creation
- 4. Safety
- 5. Problem solving

### Competences for teaching about Al

### Basic digital skills

- Content creation
- Cloud usage
- Data analysis and representation
- Collaboration and communication tools

#### Computational thinking

- Design thinking
- Problem-solving
- Block-based programming
- Text-based programming

#### Mathematics

- Fundamentals of statistics
- · Fundamentals of probability

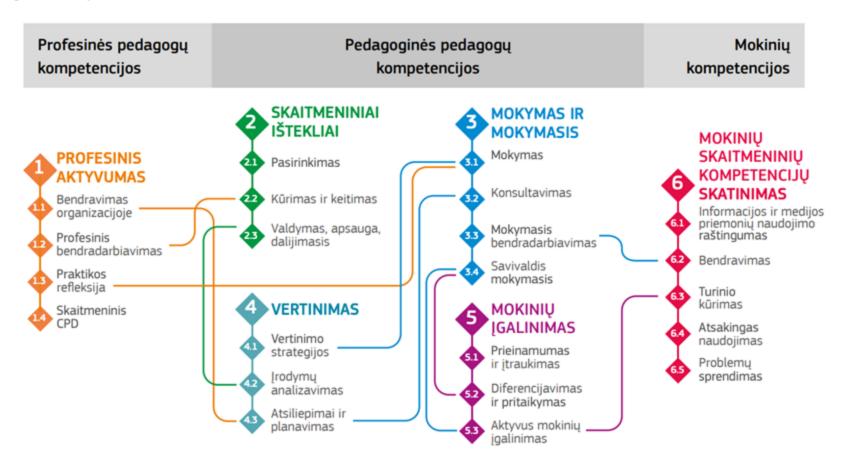
### Existing applications of Al

- To provide a realistic view of AI
- To be updated on the real usage of Al
- Ethics behind real cases
- Legal issues and data privacy

### Specific AI topics

- Perception and actuation
- Representation and reasoning
- Machine learning
- Collective intelligence

### DigCompEdu Santrauka (Redecker, 2017)



### Portugalija, Norvegija



#### DIGITAL DEVELOPMENT OF SCHOOLS' ACTION PLAN

(School's Strategic Plan - PADDE)









100% of teachers trained by 2023

### Professional development program for teachers - How?

3 Levels of Digital Proficiency

Level 1 - A1+A2

Level 2 - B1+B2

Level 3 - C1+C2

**3 Training Courses** 

Exploration and adoption of digital

Reflection. collaboration. sharing and critical use of digital

Leadership and innovation in using the digital tools

Developed by all the Teacher Training Centres at national level (2021, 2022, 2023)















Change and development





School in society

Interaction and communication



Professional digital competences for teachers



Ethics







Pedagogy and subject didactics

















### Ispanija





### LINE 1. Digital Competence in Education





https://intef.es

#### Progression model

SFDCT is based on a progression model structured in 3 stages and 2 levels of competence. These stages range from initial access to the profession to employing expert and innovative teaching practice, specifically in the case of using educational technologies as a tool to improve the learning of all pupils:



Illustration 4. Stages of progression and proficiency levels of the SFDCT. Spanish Learning Technologies Working Group (GTTA)
for the revision of the SFDCT. Creative Commons BY-SA 4.0

### Stages of progression and proficiency levels

Each of the stages comprises two proficiency levels, the characteristics of which are set out below:

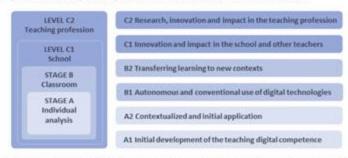


Illustration 6. Stages of progression. Spanish Learning Technologies Working Group (GTTA) for the revision of the SFDCT.

Creative Commons BY-SA 4.0



IR DUOMENŲ NAUDOJIMO
MOKYMO IR MOKYMOSI SRITYJE
ETIKOS GAIRĖS PEDAGOGAMS



Kovos su dezinformacija ir skaitmeninio raštingumo skatinimo per švietimą ir mokymą gairės mokytojams ir ugdytojams