# Tiesiant tiltus: EdTech kelias į mokyklą

Prof. dr. Airina Volungevičienė

VDU Inovatyvių studijų instituto direktorė

EDEN Digital Learning Europe, Valdybos narė

Europos komisijos DELTA - Digital Education: Learning, Teaching and Assessment darbo grupės narė





## Problems



- EU member states ban technologies at school (smart phones, screens, etc), others – recommend NOT to use them during the lectures
- Evidence based challenges causing health and learning habbit problems – being – unwell
  - Screen time school students add learning screen to leasure screen time (they refuse to shorten communication and leasure time using mobile devices)
  - Brain and sight problems replacing meetings with video meetings and printed books with digital books
  - Attention deficit, digital fatigue and brain fog caused by scrolling, automatic play, attention design, notifications, likes and more...
- Poor academic performance and lower academic achievements >> consequently, self esteem of a personality (in the longer run)



"Acknowledging the positive effect social media can have on society, MEPs are concerned about the physical, psychological and material harm addictive design can have, including loss of concentration and cognitive ability, burnout, stress, depression, limited physical activity. They are particularly worried about the prolonged impact on minors' health, and want more research on the risks related to online services."

https://www.europarl.europa.eu/news

# Problems because of a wrong way?



- The hype of the problem during and after pandemics clarified the lack of balance and quality of the solutions proposed to schools
- Schools and teachers shared dissapointment with EdTech and education communication gap increased
- 50 years of legacy of online and digital learning and teaching were ignored
- Newcomers into digital education were "kicking the doors" and lobbying with EdTech which was too young
- Top-down approach and funding proved unsustainable for many and *spoilt the* broth at school
- Digital fatigue, resilience took over
- Dissapointment with the process and the results what's next? BAN!

Measures on the way

New EU rules needed to address digital addiction



- Call to ban addictive techniques like endless scrolling or automatic play
- Moving from attention economy to ethical design
- Introduction of digital "right to not be disturbed"
- All online services and products must be safe for children to use
- This link provides you with more info: <u>New EU rules needed to</u> <u>address digital addiction | News | European Parliament (europa.eu)</u>

"companies should be obliged to develop ethical and fair digital products and services"

https://www.europarl.europa.eu/news/en/press-room/20231208IPR15767/new-eu-rules-needed-to-address-digital-addiction



# Join European Digital Education Hub

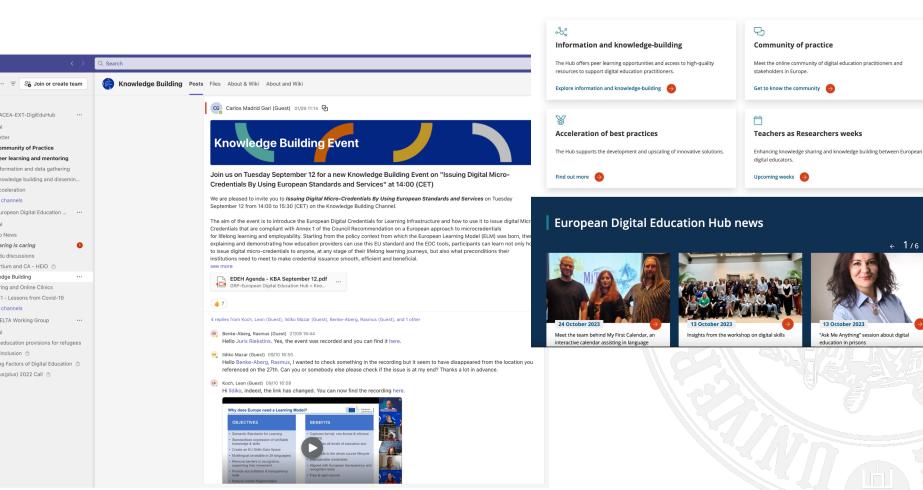
Mentorship and Clinics Knowledge Building Activities Accelerator Reading Corner

... and much more!



#### What can I find on the European Digital Education Hub?

< 1/6 →

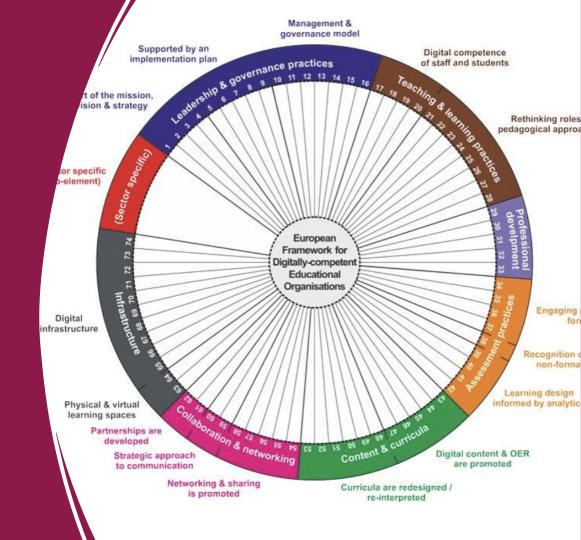


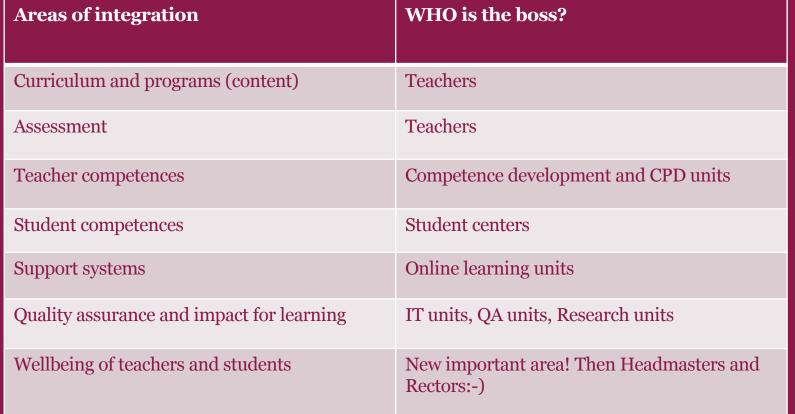
cceleration

edge Building

# The right way of EdTech to Education

DigCompOrg

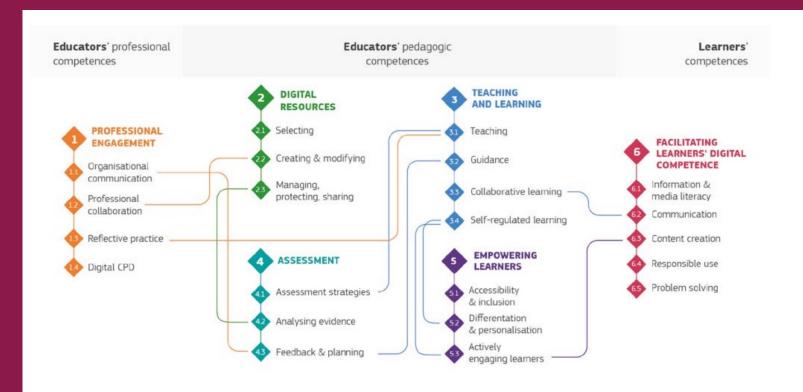






### DigCompEdu areas are important for EdTech to find its place







#### Virtuali didaktinė laboratorija

Mūsų tikslas – inovatyvus ir skaitmeniškai kompetentingas pedagogas!

Išbandyti įrankius

#### 7 įrankių grupės



VYTAUTO

DIDŽIOIO

#### Atvirų švietimo išteklių įrankiai

Atvirieji švietimo ištekliai (AŠI)
– mokymo, mokymosi, tyriminė
medžiaga, kuri yra laisvai
prieinama, nemokama, su
galimybe ją naudoti, adaptuoti,
platinti.



#### Bendravimo bendradarbiavimo įrankiai

Skaitmeninės technologijos padeda per atstumą bendrauti ir bendradarbiauti su kolegomis ir besimokančiaisiais bei kitais dalininkais – tėvais, socialiniais partneriais, bendruomene.



#### Ugdymo turinio kūrimo įrankiai

Sukūrus ugdymo turinį skaitmeninėje erdvėje jis tampa prieinamesnis, lengviau ir greičiau pasiekiamas visą parą ir išvisur kur yra interneto ryšys.



#### Ugdymo organizavimo įrankiai

Mokymo (-si) procesas kokybiškai organizuojamas tik tada, kai visi studijų parametrai yra tarpusavyje suderinti.



#### Vertinimo įrankiai

Skaitmeninis vertinimas – tai įrodymų, skirtų įvertinti studentų pasiekimus, pateikimas, valdomas naudojant skaitmenines technologijas.



#### Veiklos tyrimo įrankiai

Reflektavimas sudaro galimybes dėstytojui pasitikrinti, kas jam pavyko, o kas ne, arba ne taip kaip tikėjosi.



#### Metakognityvinės veiklos irankiai

Dėstytojai/mokytojai įvertindami metakognityvaus mąstymo svarbą geba aktyviai jį taikyti praktinėje veikloje, analizuodami bei tobulindami mokymo(si)

procesą.

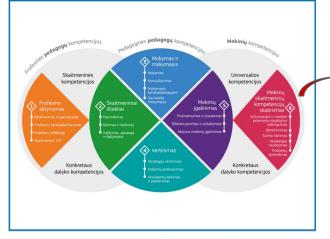


#### Peržiūrėti visus įrankius

Pateikiamas visų įrankių sąrašas.

## http://edulab.vdu.lt

- Each tool / EdTech solution is assigned to one or several didactical groups in the virtual laboratory
- All tools/ EdTech solutions are introduced to (future) teachers during primary teacher training and CPD
- Digitally competent teacher program is aligned with EdTech solutions and present their added value to learning and teaching



#### Competences for teaching with Al

Area 1: Professional Engagement

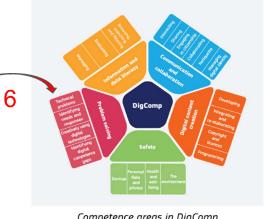
Area 2: Digital resources

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 AI

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

#### Specific AI topics

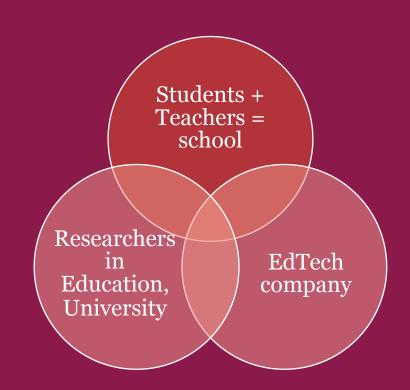
- Perception and actuation
- Representation and reasoning
- Machine learning

**EDEH Squad report on AI material** 

# New culture of co-development of EdTech — to research the impact of EdTech for education and co-develop solutions



- primary teacher training programs
- CPD programs
- selection of EdTech on evidence based added value to education
- research on learning problems and their causality
- considering competence, curriculum and environment together
- working with leadership in education
- arguing for and recommending valuable EdTech solutions
- keeping it international
- co-developing solutions
- involving phd and research placements
- collaborating in finding solutions for learnig problems
- finding common language!



education estonia

Why Estonia? Education system Solutions Studying Blog Reports Toolkit Contact

# Digital Competence: Empowering teachers and students

#### Teachers' digital competence framework

The Estonian teachers' digital competence framework is adapted from DigCompEdu 2019 and it has six dimensions:

- professional development and engagement
- 2. digital resources
- 3. teaching and learning
- 4. assessment

6. facilitating learners' digital competence

5. empowering learners

#### Students' digital competence framework

The students' digital competence framework is adapted from DigComp 2.1 and it has five dimensions:

- 1. **information and data literacy** (e.g. articulating needs, judging the relevance of sources, organising digital data);
- 2. communication and collaboration:
- 3. **digital content creation** (e.g. creating, improving and editing, understanding copyright, giving understandable instructions to computer systems);
- 4. safety;
- 5. problem-solving.

'www.educationestonia.org/innovation/digital-competence/

#### Let's discuss



- Which way is the right way for EdTech to school?
  - A sprint? To innovate and transform learning and teaching?
  - An alternative school solution?
  - "We know how to solve learning problems best"?
  - Private lessons if school teachers fail?
  - To make everything digital the cool digitalization approach of X country?
  - Or maybe
  - Legacy of eduaction + EdTech and innovation for learning and teaching?
  - Transformation and innovation needed, but keep what works well?
- Which way is more sustainable?
- University propose a thoughtful and collaborative way, consistent with the legacy in Education: competence framework, didactics and learning environment

Vytautas Magnus University Institute for Study Innovations and the Academy of Education

#### **INVITE**

EdTech
Teachers + students = schools

to go hiking EdTech mountains together and promise:

- to find schools in the caves, on the peaks and down bellow
- to listen to teacher stories of failures and success
- to bring water, but also the fire when it is gone and heal the scrateches
- to receive support from the rescue teams:

EDEN Digital Learning Europe European Digital Education Hub



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Airina Volungevičienė @vdu.lt



