Skaitmenizavimo iššūkiai Europos švietimo politikos kontekste:

Skaitmeniškai kompetentingo dėstytojo perspektyva

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Prof. dr. Airina Volungevičienė

Professor in Education, Education Academy

Director of the Institute for Study Innovations

Founder, former Director and President at EDEN Digital Learning Europe

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EdTech = education technology

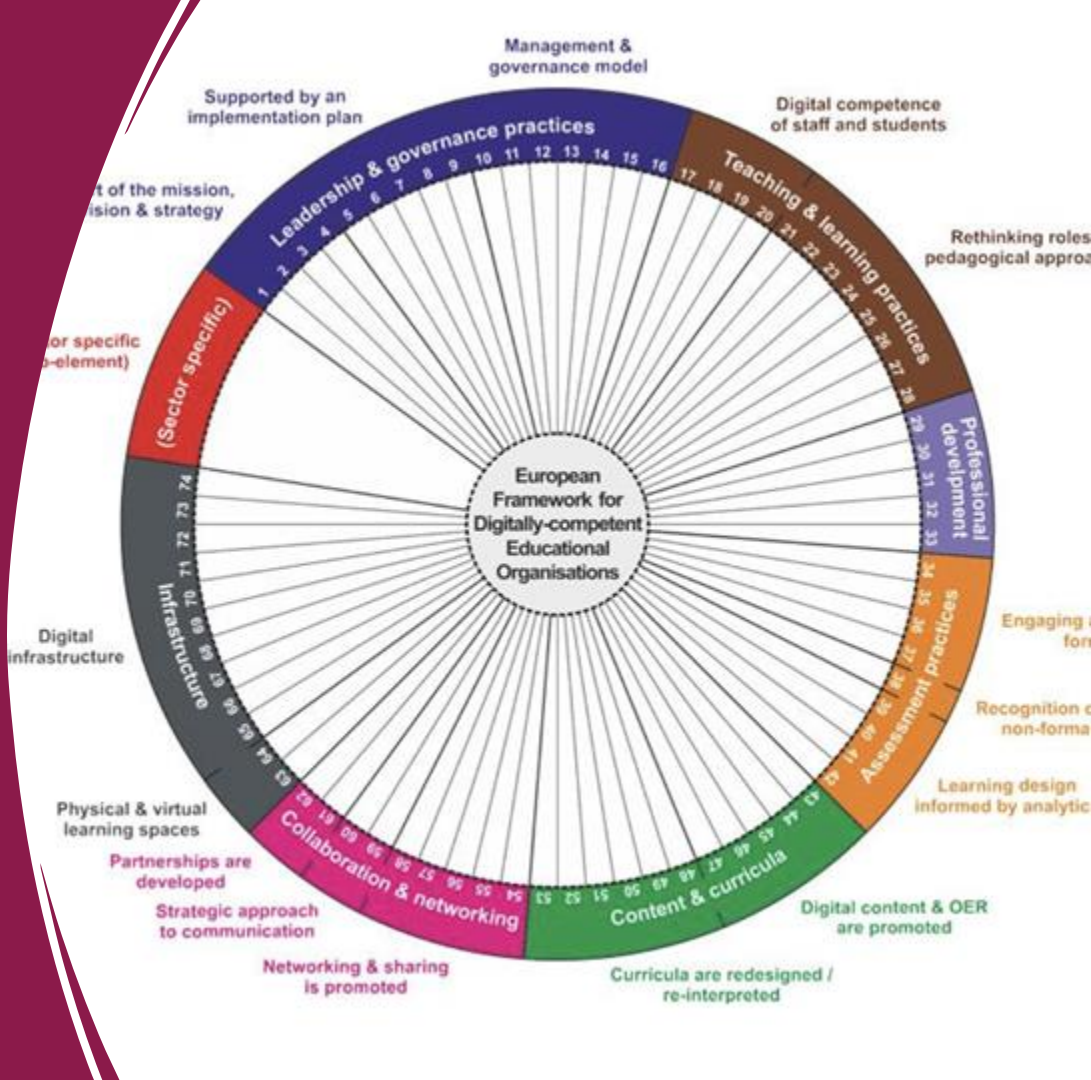
should be technology for education, not vice versa to be of interest to research in education

its mission is to enhance/ support learning, teaching and assessment

EdTech - tai švietimo technologija, kurios paskirtis praturtinti, sukurti pridėtinę vertę mokymo, mokymosi ir vertinimo procesio

The right way of EdTech (incl. AI) to Education

DigCompOrg



Google Scholar says: Stand on the shoulders of giants

Legacy of technology application in education stands on the shoulders of giants

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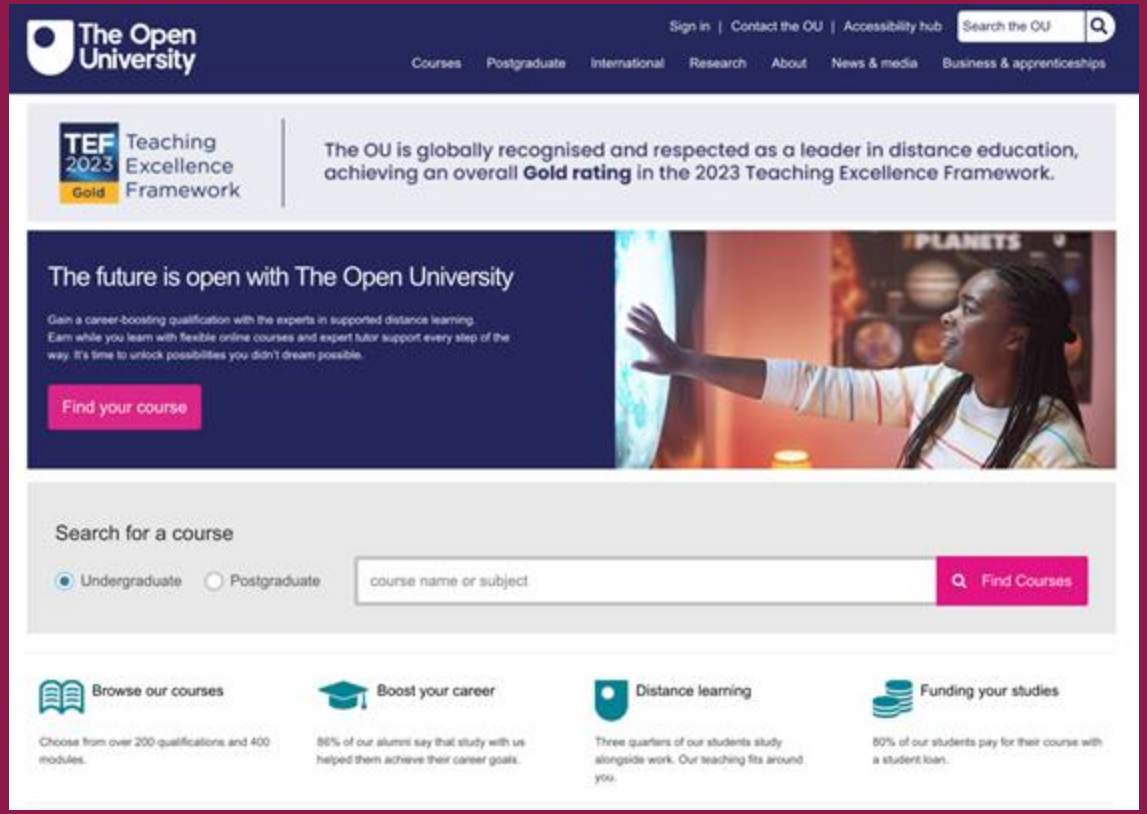
https://www.open.ac.uk/

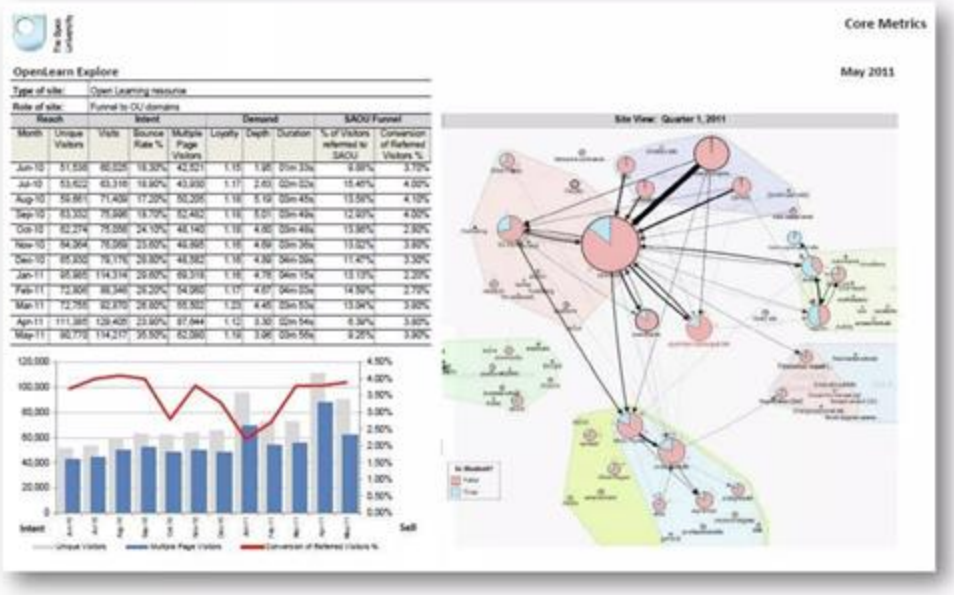


Impact of Open Media at the Open University

Andrew Law, Director of Open Media Unit

https://www.slideshare.net/slideshow/ukolneim-andrewlaw/8544547#3

Blessed with Data …



EdTech

a short form of educational technology, referring to digital and other connected technologies used to conduct or support education.

EdTech should be understood as covering a wide range of technologies - digital, interactive, broadcasting, synchronous and asynchronous - that are deployed in attempts to maintain educational continuity through an unprecedented disruption. Some definitions include radio and television, but most often internet - connected technologies (beyond specific hardware and software products) are concerned.

Mark West, 2023. “An ed-tech tragedy?”, UNESCO publication

https://unesdoc.unesco.org/ark:/48223/pf0000386701

Research in EDU vs IT

Research in EDU vs IT

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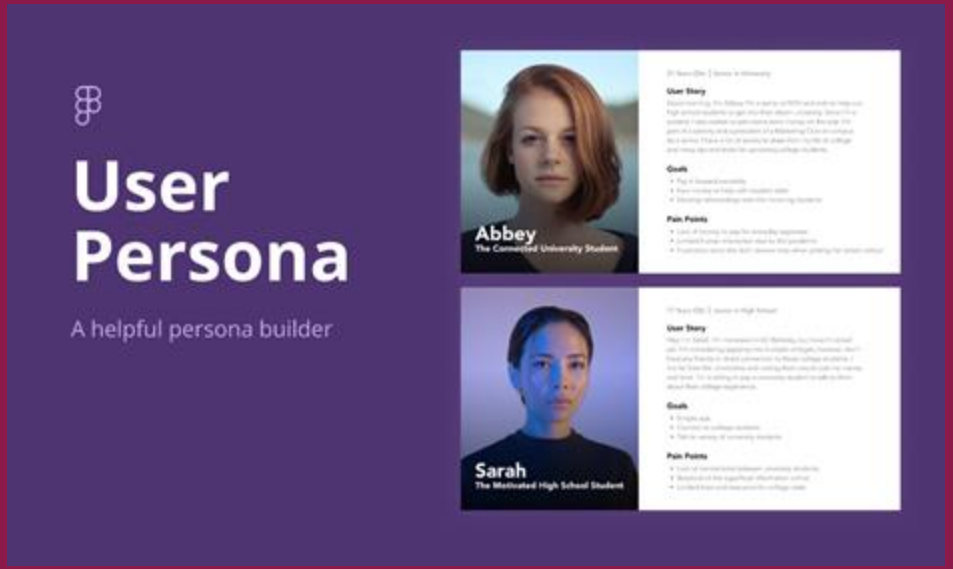
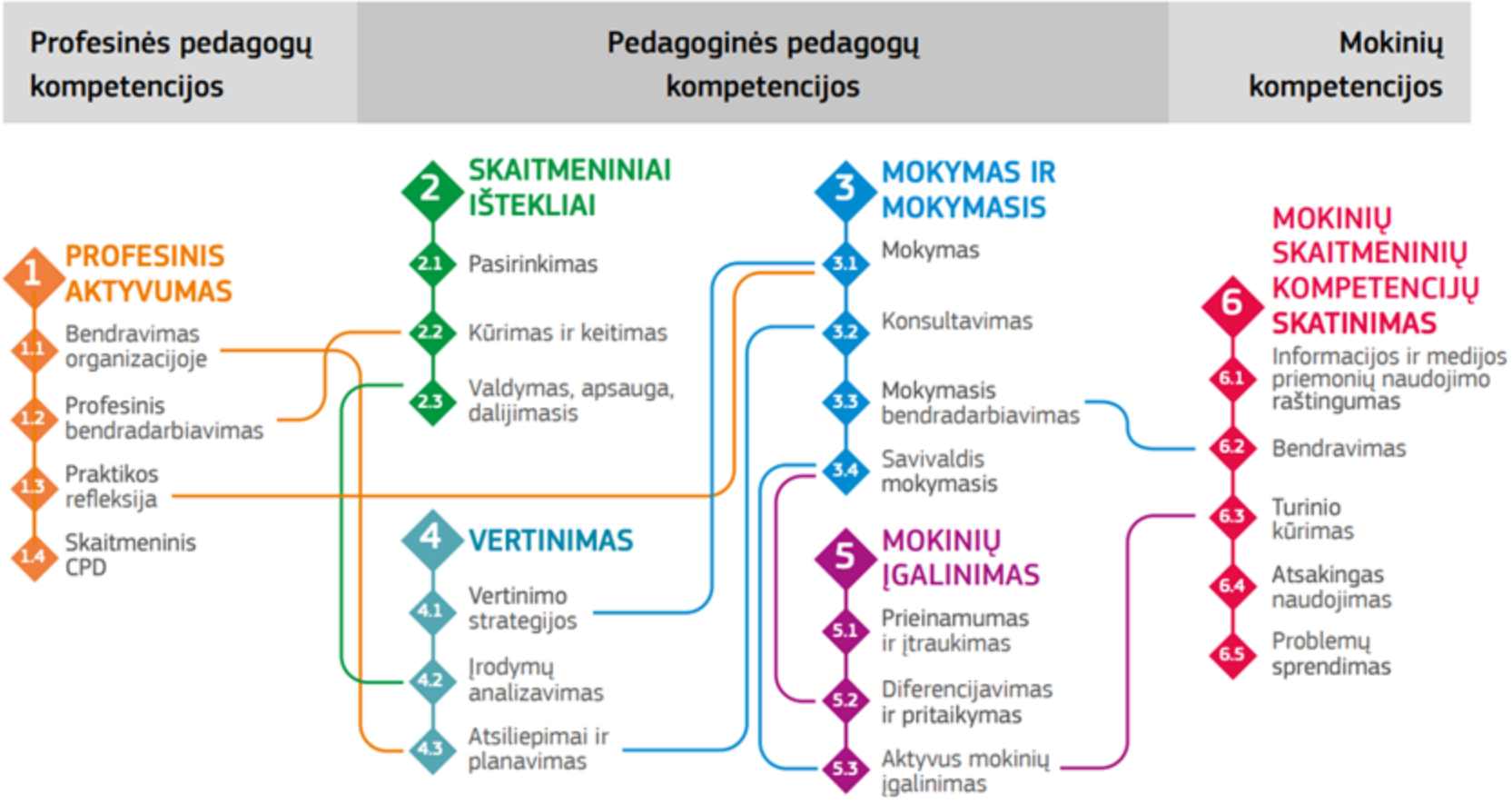
learning problem argument (EDU)

persona development (IT)




Profesinės pedagogų kompetencijos
Pedagoginės pedagogų kompetencijos
Mokinių kompetencijos
1 PROFESINIS AKTYVUMAS
1.1 Bendravimas organizacijoje
1.2 Profesinis bendradarbiavimas
1.3 Praktikos refleksija
1.4 Skaitmeninis CPD
2 SKAITMENINIAI IŠTEKLIAI
2.1 Pasirinkimas
2.2 Kūrimas ir keitimas
2.3 Valdymas, apsauga, dalijimasis
3 MOKYMAS IR MOKYMASIS
3.1 Mokymas
3.2 Konsultavimas
3.3 Mokymasis bendradarbiavimas
3.4 Savivaldis mokymasis
4 VERTINIMAS
4.1 Vertinimo strategijos
4.2 Įrodymų analizavimas
4.3 Atsiliepimai ir planavimas
5 MOKINIŲ ĮGALINIMAS
5.1 Prieinamumas ir įtraukimas
5.2 Diferencijavimas ir pritaikymas
5.3 Aktyvus mokinių įgalinimas
6 MOKINIŲ SKAITMENINIŲ KOMPETENCIJŲ SKATINIMAS
6.1 Informacijos ir medijos priemonių naudojimo raštingumas
6.2 Bendravimas
6.3 Turinio kūrimas
6.4 Atsakingas naudojimas
6.5 Problemų sprendimas

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:

1. **professional development and engagement**
2. **digital resources**
3. **teaching and learning**
4. **assessment**
5. **empowering learners**
6. **facilitating learners' digital competence**

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/

Skaitmeninės mokytojo / dėstytojo kompetencijos (DigCompEdu)

	Žinios	Gebėjimai	Požiūris (nuostatos, vertybės, atsakomybė)
2.SKAITMENINIAI IŠTEKLIAI IR TURINYS			
2.1 Skaitmeninių išteklių ir turinio pasirinkimas.			
Skaitmeniškai kompetentingas mokytojas geba naudoti skaitmenines technologijas renkantis skaitmeninius išteklius ir turinį bei jų pagalba: - formuluoti tinkamas skaitmeninių išteklių ir turinio paieškos užklausas, - pasirinkti tinkamus skaitmeninius išteklius mokymo ir mokymosi procesuose atsižvelgiant į specifinį mokymosi kontekstą ir mokymosi tikslus, - kritiškai įvertinti skaitmeninių išteklių ir šaltinių patikimumą bei tinkamumą, - įvertinti galimus skaitmeninių išteklių panaudos apribojimus (tokius kaip autorinės teisės, failo tipas, techniniai reikalavimai, teisinės nuostatos ir prieinamumas), - įvertinti skaitmeninių išteklių naudą siekiant mokymosi tikslų, konkrečios mokinių grupės kompetencijų lygį ir pasirinktą pedagoginį scenarijų.			
Naujokas (A1 lygis) **Tyrinėtojas (A2 lygis)**	A1 – įvardija ir apibrėžia pagrindines skaitmenines technologijas, naudojamas ieškoti skaitmeninių išteklių ir turinio; A2 – paaiškina, kaip formuluoti tinkamas skaitmeninių išteklių ir turinio paieškos užklausas, kaip pasirinkti tinkamus skaitmeninius išteklius mokymo ir mokymosi procesuose, tyrinėja skaitmeninius mokymo ir mokymosi išteklius internete bei pagrindines platformas, kuriose tokie ištekliai yra talpinami.	A1 – geba naudoti pagal instrukciją pagrindines paieškos sistemas apdoroti informaciją internete ir kartais tvarkyti skaitmeninius mokymo ir mokymosi išteklius; A2 – geba kompiuterinio raštingumo lygmenyje naudoti žinomų platformų paieškos sistemas, formuluoti tinkamas skaitmeninių išteklių ir turinio paieškos užklausas ir pasirinkti tinkamus skaitmeninius išteklius priklausomai nuo specifinio mokymosi konteksto ir mokymosi tikslų; tyrinėja technologijų funkcijas ir kitas galimybes.	A 1 – taiko siaurą išteklių asortimentą mokymo ir mokymosi procesuose arba naudojasi programoje pasiūlytais ir nerodo iniciatyvos plėtoti skaitmeninių išteklių asortimento vadovaudamasis bendra tvarka ar siekdamas pritarimo; A 2 – domisi skaitmeninių išteklių paieška, tačiau ribotai naudojasi paieškos galimybėmis, skaitmeninių technologijų taikymą mokymo ir mokymosi procesuose priima kaip tvarką ir organizacijos įdiegtą priemonę.
Diegėjas (B1 lygis) **Ekspertas (B2 lygis)**	B1 – pasirenka keletą skirtingų skaitmeninių technologijų, skirtų ieškoti skaitmeninių išteklių ir turinio pagal bazinius kriterijus ir technologijų paskirtį, kritiškai vertina skaitmeninių išteklių ir turinio patikimumą ir tinkamumą; B2 – vadovaudamasis kompleksiniais atrankos kriterijais ir argumentais, pasirenka tinkamiausią technologiją, skirtą ieškoti ir pasirinkti išteklius, įvertina skaitmeninių išteklių ir turinio panaudos apribojimus ir prieinamumą.	B1 – geba tinkamai pasirinkti ir naudoti skirtingas skaitmenines technologijas, skirtas pasitelkti ir naudoti skaitmeninius išteklius ir turinį naudodamasis baziniais kriterijais; filtruoja paiešką, taiko atrankos kriterijus siekdamas gauti tikslingus rezultatus; B2 – pritaiko skaitmeninių technologijų kompleksinius pasirinkimo kriterijus ir naudoja tinkamiausią technologiją adaptuodamas paieškos parametrus, pasirenka redaguojamus išteklius pagal licencijos tipą, failo formatą, išteklių kokybę ir panaudojamumą, įvertina patikimumą ir tinkamumą mokiniams, pritaiko išteklius pagal mokymosi tikslus, integruoja technologijas savo praktikoje ir nuolat ją tobulina.	B1 – atsakingai pasirenka, naudoja ir pakartotinai panaudoja išteklius pagal bazinius atrankos kriterijus, demonstruoja atsakingą požiūrį, laikosi etiketo, privatumo nuostatų ir pagarbos; B2 – integruoja naujas vertybines nuostatas savo praktikoje, atsakingai renkasi, adaptuoja, pakartotinai panaudoja išteklius ir turinį, vertina jų panaudojamumą teikiant grįžtamąjį ryšį ir rekomendacijas.
Lyderis (C1 lygis) **Iniciatorius C2 lygis)**	C1 – analizuoja skirtingų skaitmeninių technologijų taikymą skirtingose skaitmeninių išteklių ir turinio paieškos sistemose, įvardija išsamius kriterijus, reikalingus išsiaiškinti vykdant visapusę išteklių ir turinio paiešką, atranką ir pritaikant mokymo ir mokymosi procesuose. C2 – įvertinęs skirtingų skaitmeninių technologijų taikymą, aiškina ir argumentuoja išteklių pasirinkimo išsamius kriterijus, kokybės reikalavimus ir panaudojamumo vertę siekiant mokymosi tikslų pagal konkrečios mokinių grupės kompetencijų lygį	C1 – meistriškai naudoja skirtingas skaitmenines technologijas, skirtingus šaltinius ir išsamius kriterijus vertindamas ir pasirinkdamas išteklius visais įmanomais aspektais, pritaiko pagal kontekstą išteklius mokymo ir mokymosi procese, tikrina išteklių patikimumą; C2 – meistriškai taiko technologijas pagal paskirtį, konsultuoja kolegas dėl išteklių paieškos šaltinių, saugyklų ir strategijų, kuria savo paties išteklių saugyklą, tinkamai adaptuoja ir užtikrina kolegoms prieigą prie saugyklos, strategiškai taiko meistriškus	C1 – skleidžia naujas vertybines nuostatas, taiko platų požiūrį į skaitmeninių išteklių pritaikomumą užtikrindamas ir laikydamasis kokybės ir etikos panaudos principų; C2 – įgalina kolegas pasirinkti ir naudotis skaitmeniniais ištekliais ir plėtoja jų panaudojamumo kultūrą, nuosekliai veikia ir kuria naujas praktikas naujų vertybių kontekste.

Skaitmeniniai ištekliai

Skaitmeninių išteklių pasirinkimas

Identifikuojami, vertinami ir pasirenkami mokyti ir mokytis reikalingi skaitmeniniai ištekliai.
Renkantis skaitmeninius išteklius ir planuojant jų naudojimą, atsižvelgiama į konkretų mokymosi tikslą, kontekstą, pedagoginį metodą bei mokinių grupę.

Skaitmeninių išteklių kūrimas ir keitimas

Keičiama ir kuriama remiantis atvirosios licencijos bei kitais leistinais ištekliais. Kuriami ir bendradarbiaujant kuriami nauji skaitmeniniai švietimo ištekliai. Kuriant skaitmeninius išteklius ir planuojant jų naudojimą, atsižvelgiama į konkretų mokymosi tikslą, kontekstą, pedagoginį metodą bei mokinių grupę.

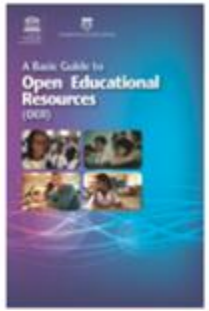
Skaitmeninių išteklių valdymas, apsauga ir dalijimasis

Skaitmeninis turinys sutvarkomas ir pateikiamas mokiniams, tėvams ir kitiems pedagogams. Efektyviai apsaugomas slaptas skaitmeninis turinys. Laikomasi ir tinkamai taikomos privatumo bei autorių teisių taisyklės. Suprantama, kaip naudojamos ir kuriamos atvirosios licencijos bei atvirieji švietimo ištekliai, įskaitant tinkamą jų paskirstymą.

Kokie svarbūs veiksniai lemia aukštos kokybės nuotolinio mokymosi patirtis nuotolinių studijų aplinkoje studentų nuomone? (2020 gruodžio 2 d.)

1. **Pagrindiniai komponentai** (pagrindiniai komponentai, naudojami nuotolinių studijų aplinkoje: aplinkoje pateikti žiniaraščiai ir vertinimo priemonės, paprasta navigacija, pažymių knygelė, skelbimai)
2. **Dėstytojo teikiama pagalba** (studentų suvokimas apie tai, ko dėstytojas tikisi, kokios veiklos tikimasi, kaip bus teikiamas grįžtamasis ryšys, kokiais kriterijais grindžiamas vertinimas)
3. **Dėstytojo sąveika/ dalyvavimas** (student suvokiams apie paskaitų kokybę, nurodymus mokymuisi, individual grįžtamąjį ryšį, taip pat motyvavimas, skatinimas)
4. **Kognityvinė sąveika** (studentų nuomonė apie studijų turinį, dėstytojo gebėjimą reflektuoti kritiško mąstymo perspektyvoje, skirtingi turinio interpretavimo kontekstai)
5. **Socialinis komfortas internete** (dėstytojo gebėjimas sukurti aplinką, kurioje nejaučiamas nerimas, studentai jaučiasi patogiai, gali kritiškai diskutuoti ir pateikti nuomonę)
6. **Interaktyvus mokymasis** (aukšto lygio funkcionaluams ir interaktyvumas)
7. **Socialinė sąveika/ dalyvavimas** (student tarpusavio sąveikos kokybės samprata)

Van Wart, M., Ni, A., Medina, P. *et al.* Integrating students' perspectives about online learning: a hierarchy of factors. *Int J Educ Technol High Educ* **17,** 53 (2020). https://doi.org/10.1186/s41239-020-00229-8



A Basic guide to open educational resources (OER)

Corporate author : Commonwealth of Learning [55]
Person as author : Butcher, Neil [10], Kanwar, Asha [6], Uvalic-Trumbic, Stamenka [21]
ISBN : 978-1-894975-41-4
Collation : 133 p.
Language : English
Also available in : Español
Year of publication : 2011, 2015
Licence type : CC BY-SA 3.0 IGO [11280]
Type of document : book

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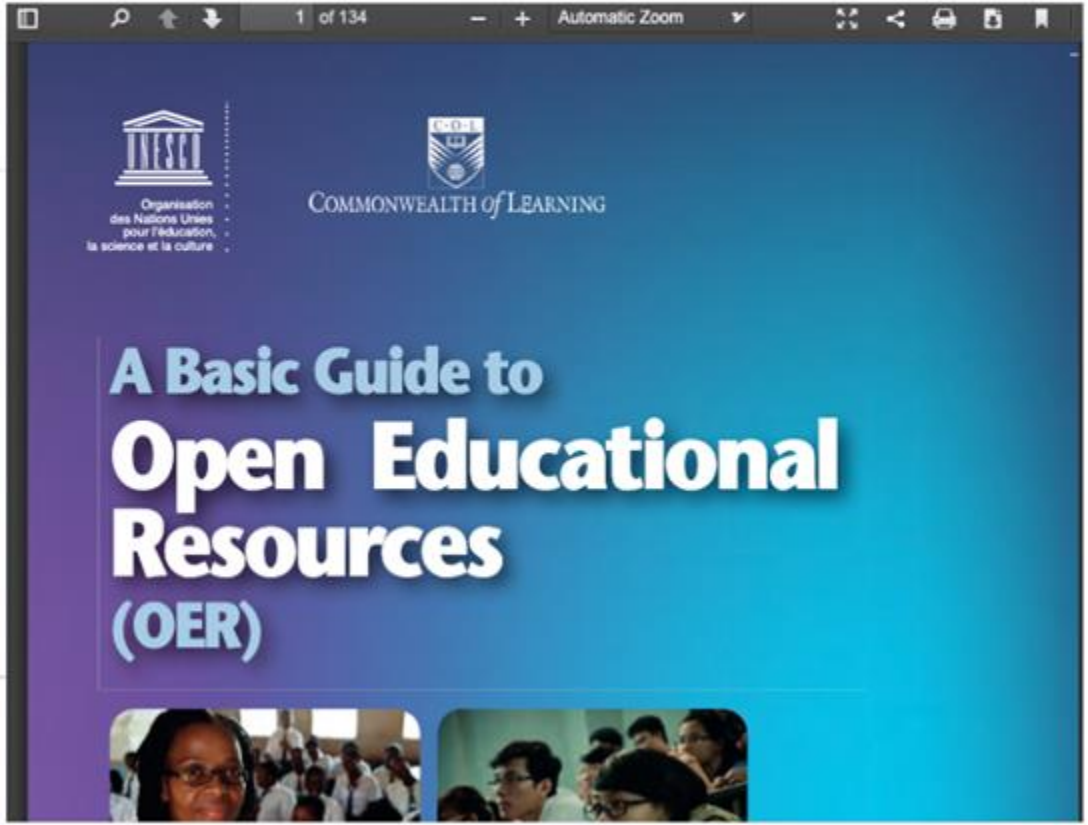
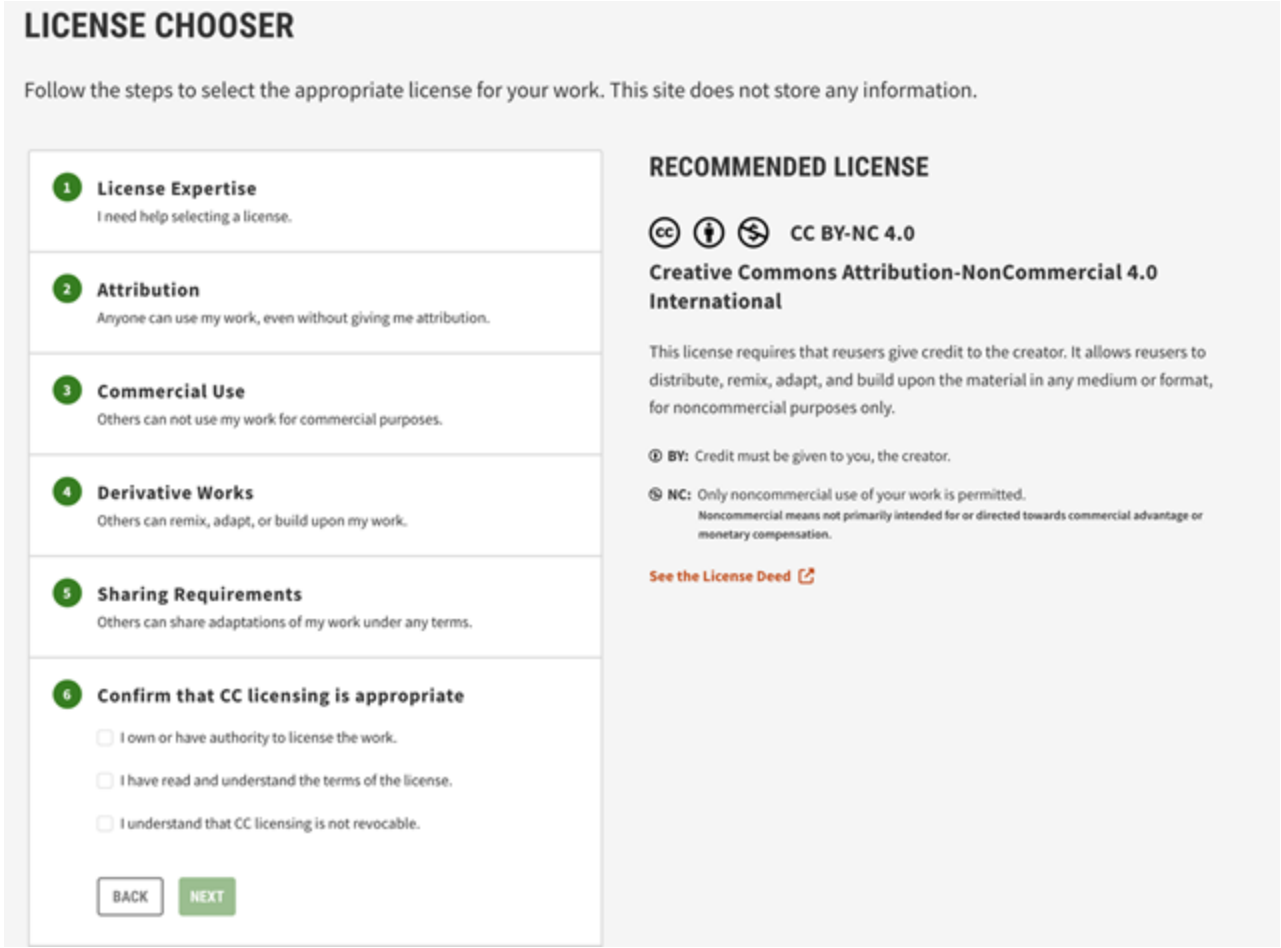
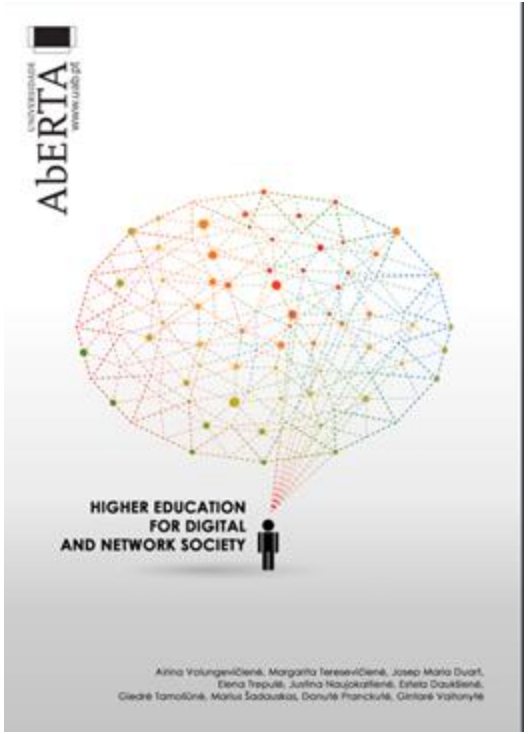


https://chooser-beta.creativecommons.org/



Kaip mokosi skaitmeninė ir įtinklinta visuomenė?



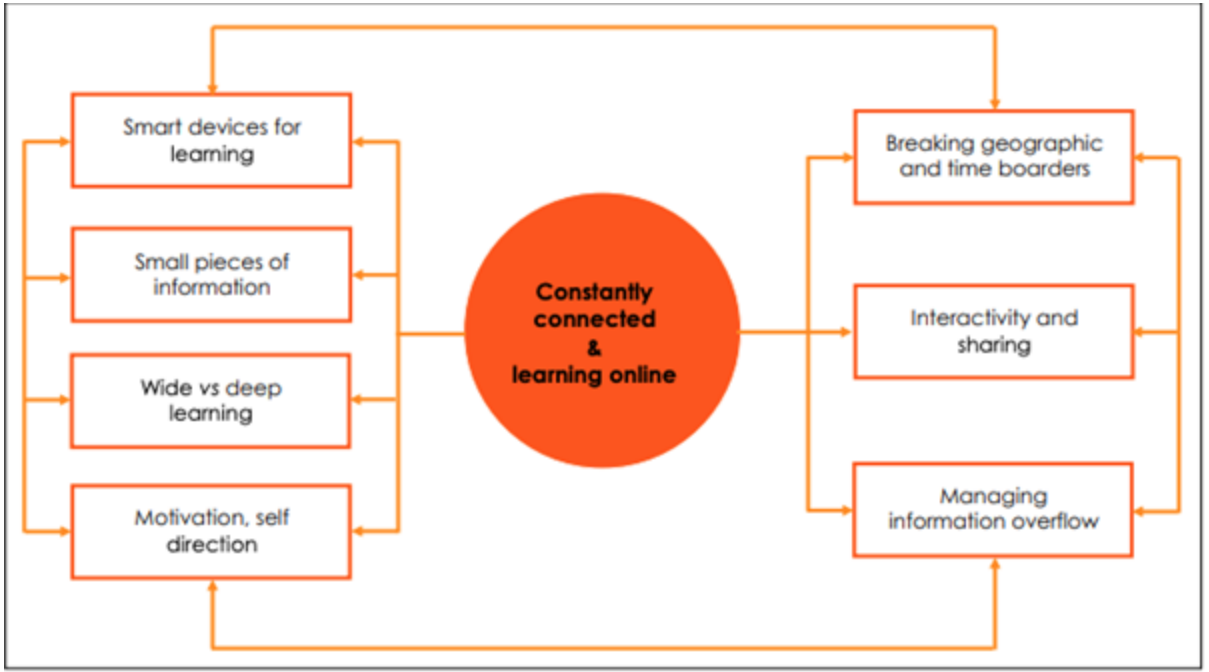


Figure 5. Constantly connected and learning online

2014-2020 m. ES investicijų veiksmų programos priemonės Nr. 09.3.3-LMT-K-712 veiklą „Mokslininkų kvalifikacijos tobulinimas vykdant aukšto lygio MTEP projektus“ MTEP projektas „Atviras nuotolinis mokymasis įtinklintai skaitmeninei visuomenei“ (projekto nr. 3.3-LMT-K-712-01-0189

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Atviras skaitmeninis studijų turinys įgalina besimokančiuosius

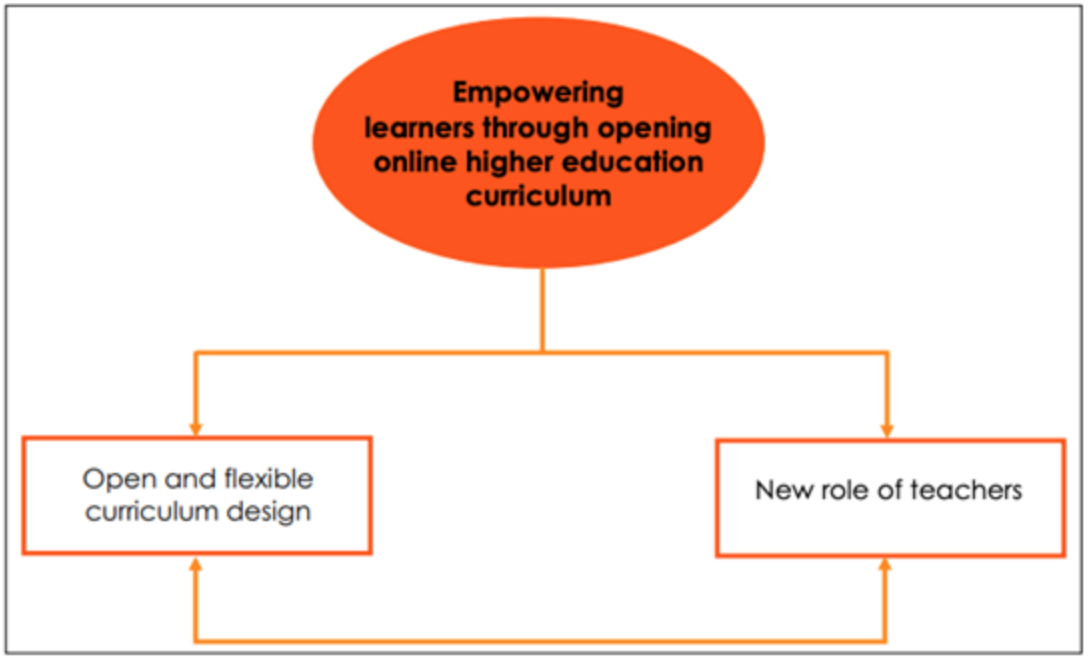

Figure 20. Empowering learners through opening online higher education curriculum

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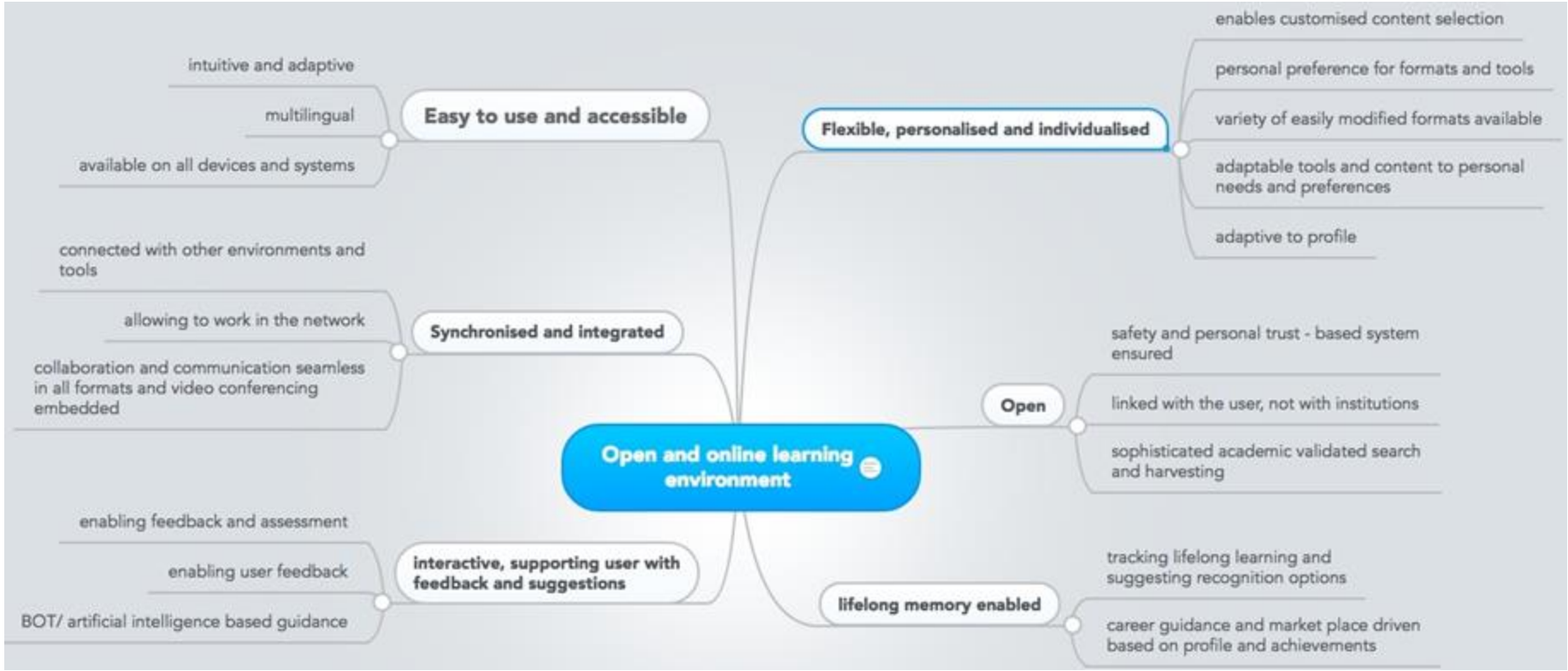
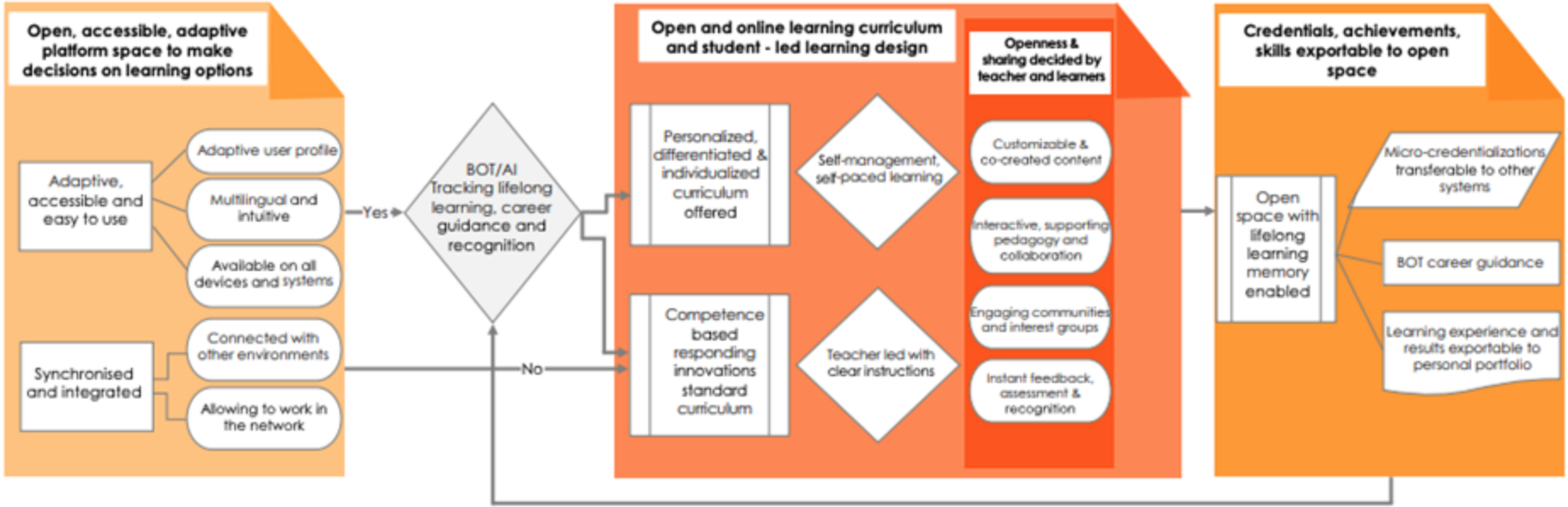
Atviros skaitmeninės aplinkos charakteristikos



The model of open and online learning environment meeting the needs of digital and network society



Mokymas ir mokymasis

Mokymas

Skaitmeninių prietaisų ir išteklių pritaikymo mokymo procesui planavimas, siekiant padidinti mokymo veiklos efektyvumą. Tinkamas skaitmeninių mokymo strategijų valdymas ir organizavimas. Eksperimentavimas naujais formatais ir pedagoginiais mokymo metodais.

Konsultavimas

Skaitmeninių technologijų ir paslaugų naudojimas gerinant sąveiką su mokiniais (atskirai ir kartu) pamokų metu ir vėliau. Skaitmeninių technologijų naudojimas, siekiant laiku ir tikslingai konsultuoti bei padėti. Eksperimentuojama su naujomis formomis bei formatais konsultuojant ir teikiant pagalbą, taip pat kuriamos naujos formos ir formatai.

Mokymasis bendradarbiaujant

Skaitmeninių technologijų naudojimas skatinant ir gerinant mokymosi bendradarbiaujant patirtį. Mokiniams suteikiama galimybė skaitmenines technologijas naudoti užduočių metu, pagerinant jų bendravimo, bendradarbiavimo ir žinių gavimo bendradarbiaujant galimybes.

Savivaldis mokymasis

Skaitmeninių technologijų naudojimas skatinant savivaldį mokymąsi, t. y. leidžiant mokiniams planuoti, stebėti ir apsvarstyti savo pačių mokymąsi, teikti informaciją apie pažangą, dalytis pastebėjimais bei rasti kūrybiškus sprendimus.

Nuotolinių studijų aplinka

Įrankiai ir priemonės

moodle

Adobe Connect

BigBlueButton

Video conferencing tools

\+ Google Meet

Premium video meetings.
Now free for everyone.

\+

VDU Moodle administratorius
Studentų įtraukimas į studijų dalykus (2019RS)
24 Aug, 14:10
VDU Moodle administratorius
Student enrollment into courses (2018 Autumn semester)
Older topics ...

Navigation

- Dashboard
  - Site home
  - My courses

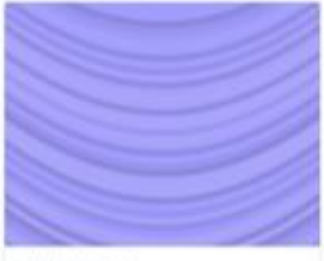
Pavyzdžiai Metodinės rekomendacijos
Kaip pasirengti atsiskaitymams nuotolin...

Pavyzdžiai Konsultacijos
Individualios konsultacijos Dėstytojams

Education Management EDUS024_EN
E-learning technologies (Unesco)

Course overview

In progress | Course name | Card



| BAIGMSVV02
Master's Thesis in Education Management

| EDUS024_EN
E-learning technologies (Unesco)

| EDUS024
E-learning technologies (Blended Learning)

No upcoming activities due

Calendar

May 2020

Mon	Tue	Wed	Thu	Fri	Sat	Sun
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

Certificates

Kaip pažinti savo studentą ir padėti siekti geresnių rezultatų
Show all certificates

Latest badges

Dėstymo kokybė 2019 pavasaris

https://edulab.vdu.lt/ugdymo-turinio-kurimas/

Technologijų pasirinkimo kriterijai

- Prieinamumas
- Kaina
- Mokymas ir mokymasis
- Interaktyvumas ir vartotojui draugiška aplinka
- Organizacijos aspektai
- Naujumas
- Greitis

Pgl. T.Bates “Teaching in a digital age” (2015)

Įrodymų analizavimas

Vertinimo strategijos

Skaitmeninės technologijos naudojamos formuojamajam (angl. formative) ir sumuojamajam (angl. summative) vertinimams atlikti. Siekiama padidinti vertinimo formatų ir metodų įvairovę bei tinkamumą.

Įrodymų analizavimas

Skaitmeninių mokinio veiklos įrodymų, rezultatų ir pažangos duomenų kūrimas, pasirinkimas, kritinis analizavimas bei interpretavimas, siekiant surinkti mokymui ir mokymuisi reikalingos informacijos.

Atsiliepimai ir planavimas

Skaitmeninės technologijos naudojamos mokiniams skirtiems tiksliniams atsiliepimams laiku pateikti. Pritaikomos mokymo strategijos ir teikiama tikslinė pagalba, remiantis įrodymais, surinktais naudojant skaitmenines technologijas. Mokiniams ir tėvams padedama suprasti įrodymus, gautus naudojant skaitmenines technologijas, bei juos panaudoti priimant sprendimus.

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Introduction to the European Learning Model

The European Learning Model (ELM) is a multilingual data model providing a single vocabulary for the description of learning in Europe. Having a single model at European level promotes the free movement of workers and learners through comparability, portability and transparency of data.

The uses of the ELM

By providing a unified way to refer to, and to describe all things related to learning, the ELM allows for the understanding of concepts in the same way across countries and organisations. This, in turn, eases the data exchange process across Europe as any organisation or entity working with learning can make use of the same concepts, making the data understandable even across languages. For instance, when providing information about a learning opportunity (such as a university degree programme or a short online course), this information can be presented in a way that is understood across all EU Member States. This way, a potential employer in another country can also discern exactly what a person has learned and achieved through a particular opportunity. The ELM has a multitude of uses, below is a list of the most common ones:

EUROPEAN DIGITAL EDUCATION HUB

Agenda

Evidence-Based Approaches to Technology Use in Early Education

December 4, 2023 | 13:00-14:30 CET

13:00 **Introduction to the theme and the importance of evidence in researching, developing and implementing technologies in early education**
Natalia I. Kucirkova, Professor in Early Childhood, University of Stavanger and The Open University

14:10 **Presentations and Panel Discussions**

1. **Christian Magnusson,** Senior Adm Officer Ministry of Education and Research, DELTA Group, Sweden, *Swedish government insights*
2. **Sandra Mathers**, Senior Researcher at the University of Oxford, *Academia-industry partnerships in supporting digital reading*
3. **Charles Mifsud**, Professor at the Centre for Literacy, Malta, *Researching the value of cutting-edge technologies through partnerships with educators*

European Commission

Translate this page

European Education Area

Quality education and training for all

Home | About EEA | Focus topics | Education levels | What's new? | Resources and tools | Funding

About education levels
National education systems are arranged in five main levels.

Early childhood education and care
Education and care for children from birth to compulsory school age.

School education
Supporting the development of quality national school education systems.

Higher education
Accelerating the transformation of an open and inclusive European higher education system.

Vocational education and training
Provides learners with skills for personal development and active citizenship.

Adult learning
A vital component of the EU's lifelong learning policy.

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Projektas bendrai finansuotas iš Europos regioninės plėtros fondo lėšų (projekto Nr. 13.1.1-LMT-K-718-05-0003) pagal dotacijos sutartį su Lietuvos mokslo taryba (LMTLT). Finansuojama kaip Europos Sąjungos atsakas į COVID-19 pandemiją.

MIKROKREDENCIALAI

2021 Spalio 27

Kuriame Lietuvos ateitį

2014–2020 metų Europos Sąjungos fondų investicijų veiksmų programa

Projekto tikslas – tyrimu siekiama pagrįsti ir įdiegti skaitmeninių mikrokredencialų teikimo procesą aukštajame moksle.

Projekto pavadinimas:	**Skaitmeniniai mikrokredencialai aukštajame moksle (MIKROKREDENCIALAI)**
Projekto Nr:	**13.1.1-LMT-K-718-05-0003**

Elena Trepulė, Arūnė Volungevičienė, Margarita Teresevičienė, Estela Daukšienė, Rose Greenspon, Giedrė Tomolienė, Marius Šaduikis, Gintarė Vaitonytė

Atvirojo nuotolinio mokymosi vertinimo ir pripažinimo gairės: ieškant dermės su Nacionaline ir Europos kvalifikacijų sąrangomis

Mikrokredencialų sprendimai siekiant dermės ir skaidrumo

Naujos dėstytojų skaitmeninės kompetencijos
Mikrokredencializacija

	Knowledge (Content related expertise)	Skills (Application of knowledge)	Attitudes (Autonomy and Responsibility)
Subset 4.4 **(Micro-) Credentialisation** To design badges/credentials that contain all the available information to facilitate recognition (of intermediate achievements). (our own suggestion)			
Explorer (Level A)	is aware of the process of designing micro-credentials on the levels of micro and macro curriculum level and the links and meta-data between the credential and digital curriculum in a virtual learning environment	uses existing systems to issue digital credentials; designs micro-credentials on the levels of micro and macro curriculum level and the links and meta-data between the credential and digital curriculum in a virtual learning environment	interest in the potential of micro-credentials to support the principles of learning outcome recognition and ECTS transfer among EHEA
Expert (Level B)	has advanced knowledge on the process of designing micro-credentials on the levels of micro and macro curriculum level and is able to explain the links and meta-data between the credential and digital curriculum in a virtual learning environment	uses and explains a credentialing systems to issue digital credentials; consults on the process of designing digital credentials and peer-reviews micro-credentials developed on the micro and macro curriculum level and reviews as well as updates the meta-data for credentials on learning outcomes, assessment method, EQF level etc. from IT systems such as the digital curriculum in a virtual learning environment	curiosity towards digital and micro-credentials as a means to support the principles of learning outcome recognition and ECTS transfer among the EHEA
Pioneer (Level C)	has comprehensive knowledge of the process of designing micro-credentials on the levels of micro and macro curriculum level and the links and meta-data between the credential and digital curriculum in virtual learning environment	continuously monitors digital activity and reflects on and synthesises digital learner data to identify learning patterns and adapts his/her teaching strategies; critically assesses and discusses the value and validity of different data sources as well as the appropriateness of common methods used for	commitment towards empowering colleagues in designing digital and micro-credentials as a means to support the principles of learning outcome recognition and ECTS transfer among the EHEA

https://teacamp.vdu.lt/enrol/index.php?id=105

Skaitmeninių mikrokredencialų išdavimas siekiant užtikrinti skaidrų vertinimą bei mokymosi rezultatų pripažinimą

Home › Courses › DigiProf › TMO3_LT › Enrolment options

Enrolment options

DigiProf

Skaitmeninių mikrokredencialų išdavimas siekiant užtikrinti skaidrų vertinimą bei mokymosi rezultatų pripažinimą

▾ Self enrolment (Student)

Guests cannot access this course. Please log in.

Continue

5 MOKINIŲ ĮGALINIMAS

5.1 Prieinamumas ir įtraukimas

5.2 Diferencijavimas ir pritaikymas

5.3 Aktyvus mokinių įgalinimas

5 EMPOWERING LEARNERS

5.1 Accessibility & inclusion

5.2 Differentation & personalisation

5.3 Actively engaging learners

Mokinių įgalinimas

Prieinamumas ir įtraukimas

Prieigos prie mokymosi išteklių ir veiklų užtikrinimas visiems mokiniams, įskaitant turinčius specialiųjų ugdymosi poreikių. Atsižvelgiama į mokinių (skaitmeninius) lūkesčius, gebėjimus, naudojimo galimybes ir supratimą bei kontekstinius, fizinius ar kognityvinius suvaržymus skaitmeninių technologijų naudojimo kontekste.

Diferencijavimas ir pritaikymas

Skaitmeninės technologijos naudojamos pritaikant pagal skirtingus mokinių mokymosi poreikius, leidžiant jiems progresuoti skirtingais lygiais bei greičiu ir mokantis skirtingais būdais bei turint skirtingus tikslus.

Aktyvus mokinių įtraukimas

Skaitmeninės technologijos naudojamos siekiant skatinti aktyvų ir kūrybingą mokinių įsitraukimą į tam tikrą sritį. Skaitmeninės technologijos naudojamos pedagoginėse strategijose, skatinančiose universalius mokinių įgūdžius, gilų mąstymą bei kūrybingą išraišką. Mokymosi atvėrimas naujiems, realaus pasaulio kontekstams, pačius mokinius įtraukiant į savarankišką veiklą, mokslinius tyrinėjimus ar sudėtingų problemų sprendimą, arba kitu būdu didinant aktyvų mokinių dalyvavimą sprendžiant sudėtingus dalykus.

Books

Airina Volungevičienė

Learning Analytics: a Metacognitive Tool to Engage Students

Open Access

Sciendo, 2021

DOI: https://doi.org/10.2478/9788366675643

Download Cite Share

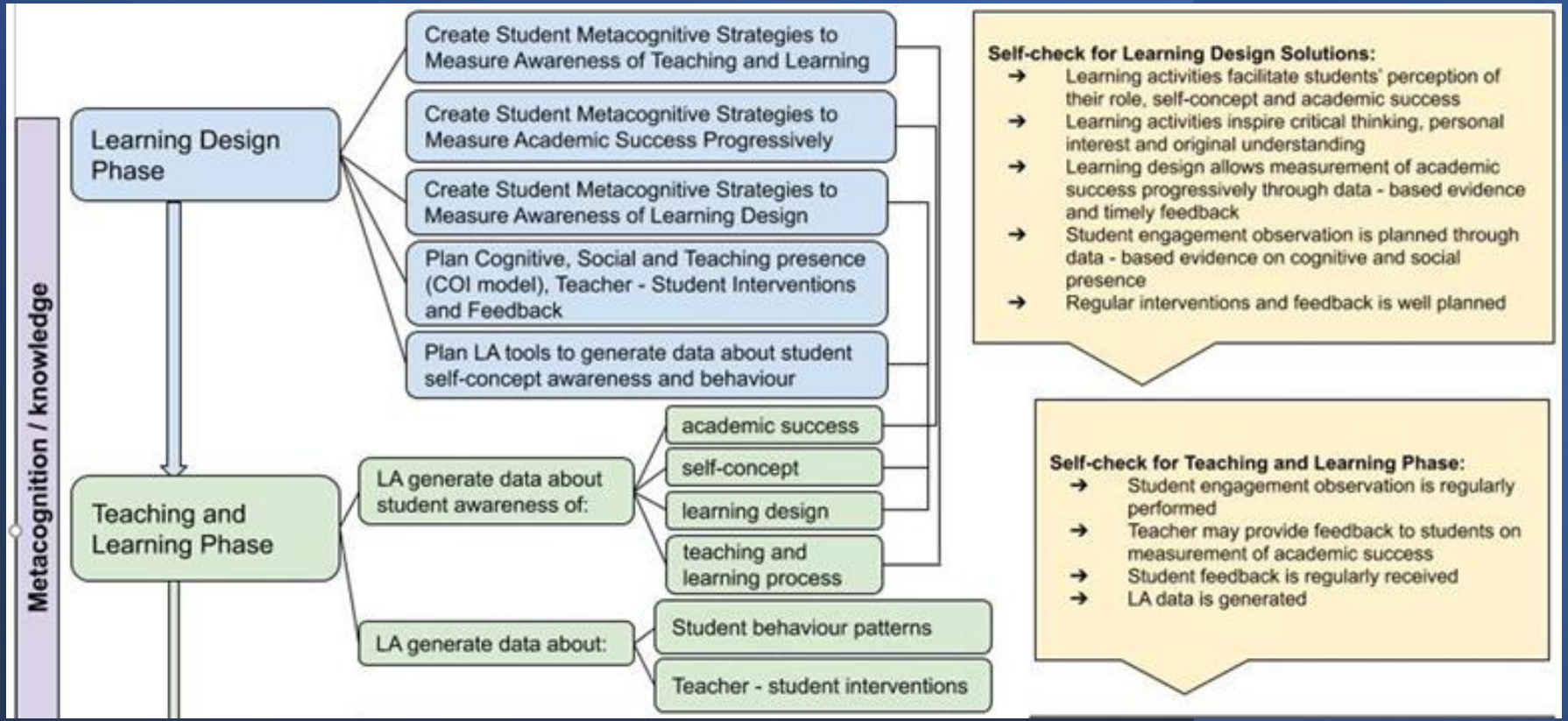
Details

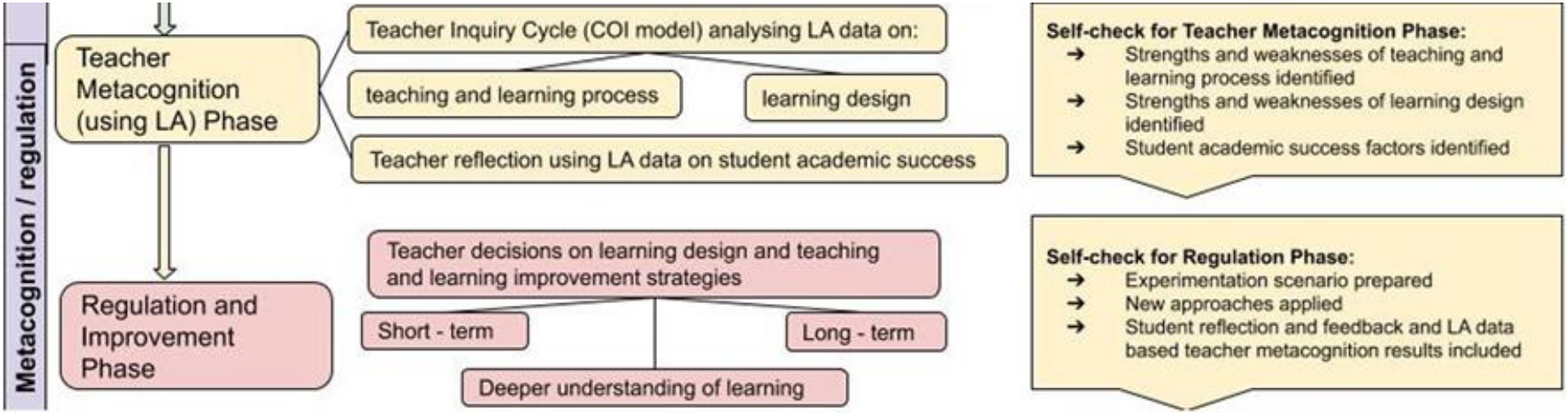
Format: Book

First Published: 20 Dec 2021

Languages: English

Pages: 200


Metacognition / knowledge
Learning Design Phase
Create Student Metacognitive Strategies to Measure Awareness of Teaching and Learning
Create Student Metacognitive Strategies to Measure Academic Success Progressively
Create Student Metacognitive Strategies to Measure Awareness of Learning Design
Plan Cognitive, Social and Teaching presence (COI model), Teacher - Student Interventions and Feedback
Plan LA tools to generate data about student self-concept awareness and behaviour
Teaching and Learning Phase
LA generate data about student awareness of:
academic success
self-concept
learning design
teaching and learning process
LA generate data about:
Student behaviour patterns
Teacher - student interventions
Self-check for Learning Design Solutions:
→ Learning activities facilitate students' perception of their role, self-concept and academic success
→ Learning activities inspire critical thinking, personal interest and original understanding
→ Learning design allows measurement of academic success progressively through data - based evidence and timely feedback
→ Student engagement observation is planned through data - based evidence on cognitive and social presence
→ Regular interventions and feedback is well planned
Self-check for Teaching and Learning Phase:
→ Student engagement observation is regularly performed
→ Teacher may provide feedback to students on measurement of academic success
→ Student feedback is regularly received
→ LA data is generated

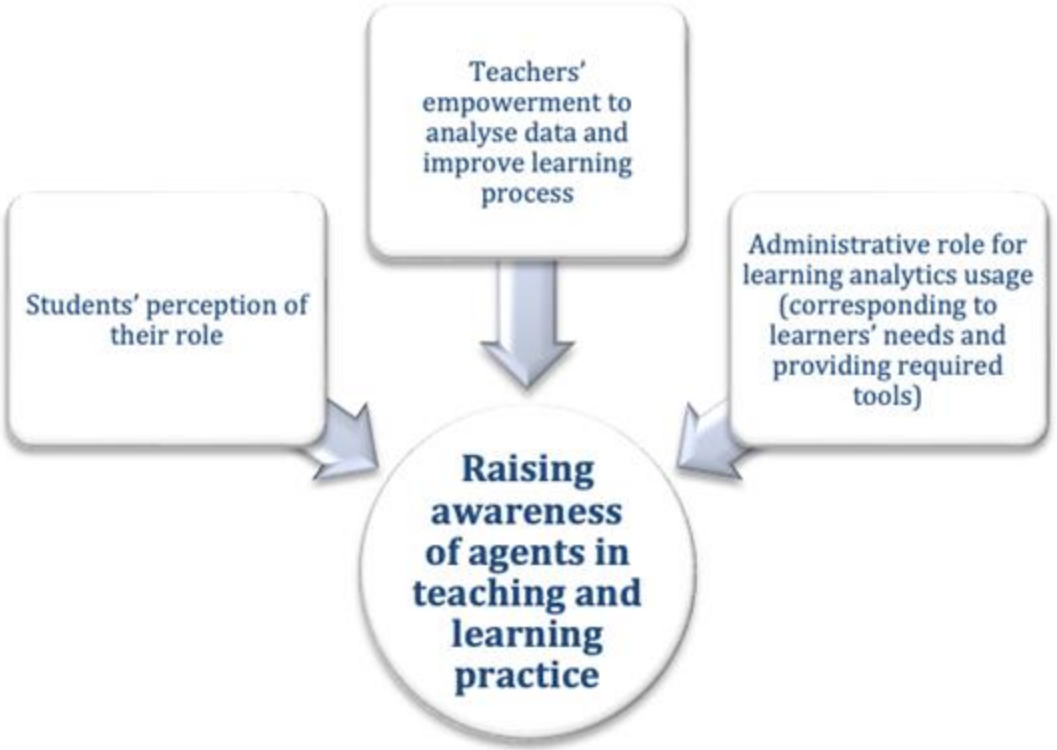

Metacognition / regulation
Teacher Metacognition (using LA) Phase
Teacher Inquiry Cycle (COI model) analysing LA data on:
teaching and learning process
learning design
Teacher reflection using LA data on student academic success
Regulation and Improvement Phase
Teacher decisions on learning design and teaching and learning improvement strategies
Short - term
Long - term
Deeper understanding of learning
Self-check for Teacher Metacognition Phase:
→ Strengths and weaknesses of teaching and learning process identified
→ Strengths and weaknesses of learning design identified
→ Student academic success factors identified
Self-check for Regulation Phase:
→ Experimentation scenario prepared
→ New approaches applied
→ Student reflection and feedback and LA data based teacher metacognition results included

How can learning analytics as a metacognitive tool be applied to developing a reflective teacher practice?

- implementation of teacher inquiry cycle and reflection on open and online teaching
- for improving curriculum and learning design

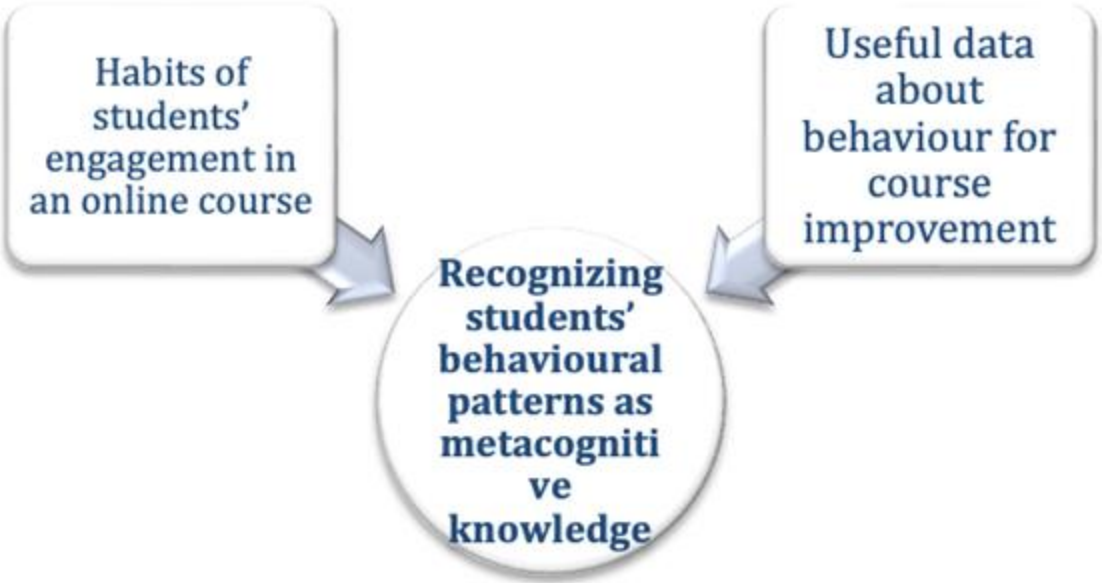
https://www.thejeo.com/archive/archive/2019_162/volungeviciene_duart_nanjokaitiene_tamoliune_misiuliene

Raising awareness of agents in teaching and learning practice



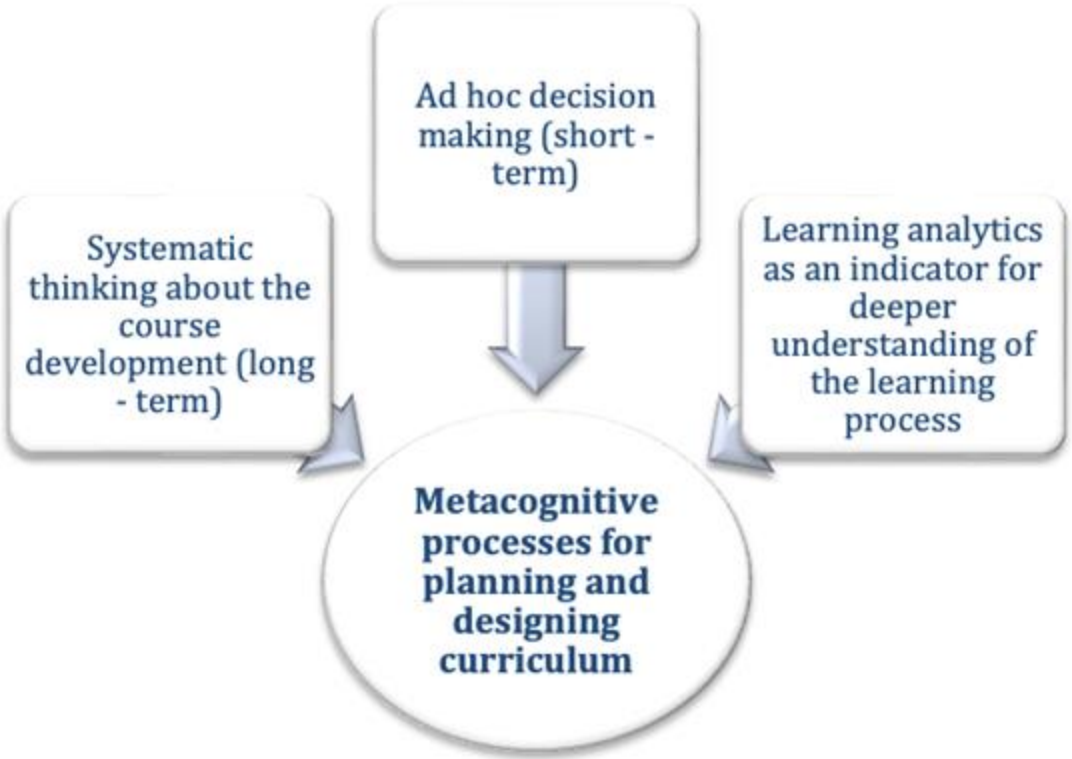
https://www.thejeo.com/archive/archive/2019_162/volungeviciene_duart_nanjokaitiene_tamoliune_misiuliene

Recognizing students' behavioural patterns as metacognitive knowledge



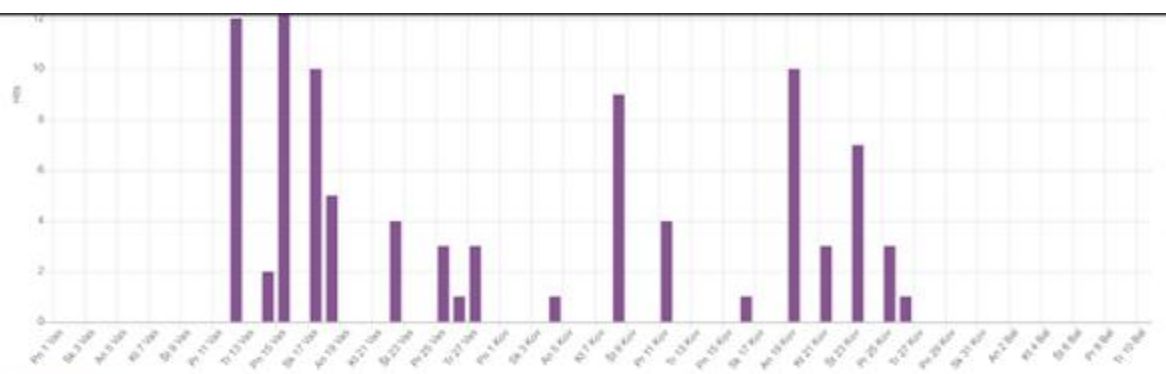
https://www.thejeo.com/archive/archive/2019_162/volungeviciene_duart_nanjokaitiene_tamoliune_misiuliene

Metacognitive processes for planning and designing curriculum



https://www.thejeo.com/archive/archive/2019_162/volungeviciene_duart_nanjokaitiene_tamoliune_misiuliene

Learning progress monitoring and measuring tools



Show chart data

Time	User full name	Affected user	Event context	Component	Event name	Description	Origin	IP address
26 kovo 2019, 3:53	Ander Arce Alonso	-	Assignment: Mid-term: Analytical paper in the form of a case study	Assignment	The status of the submission has been viewed.	The user with id '29115' has viewed the submission status page for the assignment with course module id '234404'.	web	193.219.190.189
25 kovo 2019, 7:18	Ander Arce Alonso	-	Assignment: Assignment 2: Analysis of strategic integration of technologies in education	Assignment	The status of the submission has been viewed.	The user with id '29115' has viewed the submission status page for the assignment with course module id '193409'.	web	193.219.190.189
25 kovo 2019, 12:36	Ander Arce Alonso	-	Assignment: Assignment 2: Analysis of strategic integration of technologies in education	Assignment	The status of the submission has been viewed.	The user with id '29115' has viewed the submission status page for the assignment with course module id '193409'.	web	88.119.127.235
25 kovo 2019, 12:36	Ander Arce Alonso	-	Course: EDU5024_EN E-learning technologies (Unesco)	System	Course viewed	The user with id '29115' viewed the course with id '3209'.	web	88.119.127.235
23 kovo 2019, 8:24	Ander Arce Alonso	-	Assignment: Mid-term: Analytical paper in the form of a case study	Assignment	The status of the submission has been viewed.	The user with id '29115' has viewed the submission status page for the assignment with course module id '234404'.	web	193.219.190.189
23 kovo 2019, 8:24	Ander Arce Alonso	-	Assignment: Mid-term: Analytical paper in the form of a case study	Assignment	A submission has been submitted.	The user with id '29115' has submitted the submission with id '297113' for the assignment with course module id '234404'.	web	193.219.190.189
23 kovo 2019, 8:24	Ander Arce Alonso	Ander Arce Alonso	Assignment: Mid-term: Analytical paper in the form of a case study	File submissions	Submission created.	The user with id '29115' created a file submission and uploaded '1' file/s in the assignment with course module id '234404'.	web	193.219.190.189
23 kovo 2019, 8:24	Ander Arce Alonso	-	Assignment: Mid-term: Analytical paper in the form of a case study	File submissions	A file has been uploaded.	The user with id '29115' has uploaded a file to the submission with id '297113' in the assignment activity with course module id '234404'.	web	193.219.190.189
23 kovo 2019, 8:23	Ander Arce Alonso	Ander Arce Alonso	Assignment: Mid-term: Analytical paper in the form of a case study	Assignment	Submission form viewed.	The user with id '29115' viewed their submission for the assignment with course module id '234404'.	web	193.219.190.189
23 kovo 2019, 8:23	Ander Arce Alonso	-	Assignment: Mid-term: Analytical paper in the form of a case study	Assignment	The status of the submission has been viewed.	The user with id '29115' has viewed the submission status page for the assignment with course module id '234404'.	web	193.219.190.189

6 MOKINIŲ SKAITMENINIŲ KOMPETENCIJŲ SKATINIMAS

- 6.1 Informacijos ir medijos priemonių naudojimo raštingumas
- 6.2 Bendravimas
- 6.3 Turinio kūrimas
- 6.4 Atsakingas naudojimas
- 6.5 Problemų sprendimas

6 FACILITATING LEARNERS' DIGITAL COMPETENCE

- 6.1 Information & media literacy
- 6.2 Communication
- 6.3 Content creation
- 6.4 Responsible use
- 6.5 Problem solving

Mokinių skaitmeninių kompetencijų gerinimas

Informacijos ir medijos priemonių naudojimo raštingumas

Mokymosi veikla, užduotys ir vertinimai, iš mokinių reikalaujantys perteikti informaciją, surasti informaciją ir išteklius skaitmeninėje aplinkoje, sutvarkyti, apdoroti, išanalizuoti bei interpretuoti informaciją ir palyginti bei kritiškai įvertinti informacijos ir jos šaltinių tinkamumą bei patikimumą.

Bendravimas ir bendradarbiavimas skaitmeninėje aplinkoje

Įtraukiama mokymosi veikla, užduotys ir vertinimai, kurių metu mokiniai turi efektyviai ir atsakingai naudoti skaitmenines technologijas, kad galėtų bendrauti, bendradarbiauti ir būti pilietiški.

Skaitmeninio turinio kūrimas

Įtraukiama mokymosi veikla, užduotys ir vertinimai, kurių metu mokiniai save turi išreikšti skaitmeninėmis priemonėmis bei keisti ir skirtingais formatais kurti skaitmeninį turinį. Mokiniai mokomi apie skaitmeninio turinio autorių teises ir licencijas, kaip nurodyti šaltinius bei priskirti licencijas.

Atsakingas naudojimas

Imamasi priemonių fizinei, psichologinei ir socialinei mokinių gerovei užtikrinti, naudojant skaitmenines technologijas. Mokiniams suteikiama galimybė valdyti rizikas bei saugiai ir atsakingai naudoti skaitmenines technologijas.

Skaitmeninių problemų sprendimas

Įtraukiamos mokymosi veiklos, užduotys ir vertinimai, kai mokiniai privalo atpažinti ir išspręsti technines problemas arba kūrybingai perkelti technologines žinias, priimdami naujus sprendimus.

2. THE DIGITAL COMPETENCE FRAMEWORK FOR CITIZENS

In DigComp, 5 competence areas outline what the digital competence entails. They are the following: Information and data literacy; Communication and collaboration; Digital content creation; Safety; and Problem solving.

The first 3 areas deal with competences that can be traced back to specific activities and uses. On the other hand, areas 4 and 5 (Safety and Problem solving) are "transversal" as they apply to any type of activity carried out through digital means. Elements of Problem solving, in particular, are present in all competences, but a specific area was defined to highlight the importance of this aspect for the appropriation of technology and digital practices.

Information and data literacy

To articulate information needs, to locate and retrieve digital data, information and content.

To judge the relevance of the source and its content.

To store, manage, and organise digital data, information and content.

Communication and collaboration

To interact, communicate and collaborate through digital technologies while being aware of cultural and generational diversity.

To participate in society through public and private digital services and participatory citizenship.

To manage one's digital presence, identity and reputation.

Digital content creation

To create and edit digital content.

To improve and integrate information and content into an existing body of knowledge while understanding how copyright and licences are to be applied.

To know how to give understandable instructions for a computer system.

Safety

To protect devices, content, personal data and privacy in digital environments.

To protect physical and psychological health, and to be aware of digital technologies for social well-being and social inclusion.

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

Problem solving

To identify needs and problems, and to resolve conceptual problems and problem situations in digital environments.

To use digital tools to innovate processes and products.

To keep up-to-date with the digital evolution.

FIG.3 DigComp areas (Dimension 1)

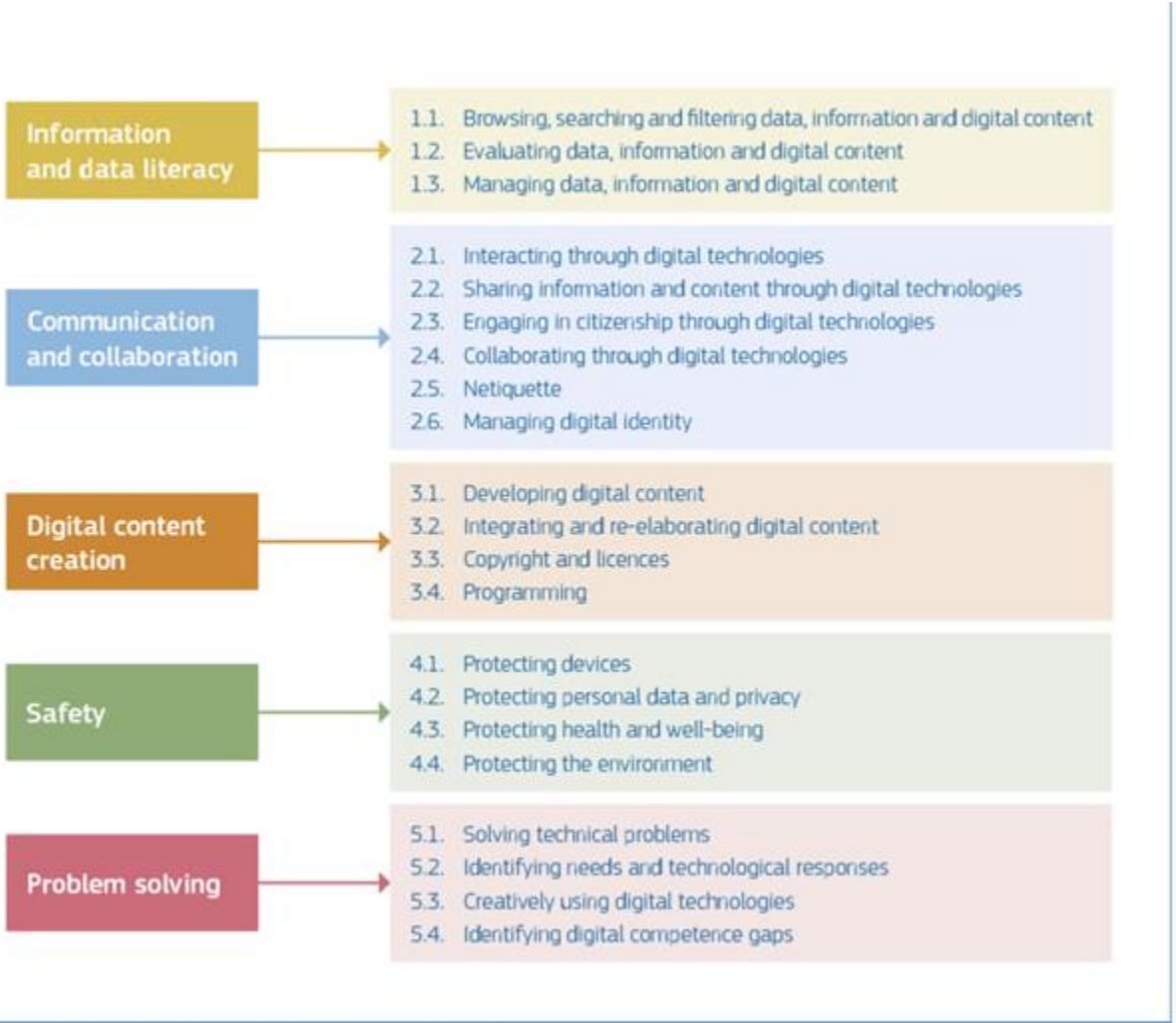


FIG.1 The DigComp conceptual reference model

DIMENSION 1 • **COMPETENCE AREA**

3. DIGITAL CONTENT CREATION

DIMENSION 2 • **COMPETENCE**

3.1 DEVELOPING DIGITAL CONTENT

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

DIMENSION 3 • **PROFICIENCY LEVEL**

FOUNDATION	1	At basic level and with guidance, I can:	• **identify** ways to create and edit simple content in **simple** formats. • **choose** how I express myself through the creation of **simple** digital means.
	2	At basic level and with autonomy and appropriate guidance where needed, I can:	• **identify** ways to create and edit **simple** content in simple formats. • **choose** how I express myself through the creation of **simple** digital means.
INTERMEDIATE	3	On my own and solving straightforward problems, I can:	• **indicate** ways to create and edit **well-defined and routine** content in **well-defined and routine** formats. • **express** myself through the creation of **well-defined and routine** digital means.
	4	Independently, according to my own needs, and solving well-defined and non-routine problems, I can:	• **indicate** ways to create and edit content in different formats. • **express** myself through the creation of digital means.
ADVANCED	5	As well as guiding others, I can:	• **apply** ways to create and edit content in different formats. • **show** ways to express myself through the creation of digital means.
	6	At advanced level, according to my own needs and those of others, and in complex contexts, I can:	• **change** content using the **most appropriate** formats. • **adapt** the expression of myself through the creation of the **most appropriate** digital means.
HIGHLY SPECIALISED	7	At highly specialised level, I can:	• **create solutions to complex problems with limited definition** that are related to content creation and edition in different formats, and self-expression through digital means. • **integrate my knowledge to contribute to professional practice and knowledge and guide others** in developing content.
	8	At the most advanced and specialised level, I can:	• **create solutions to solve complex problems with many interacting factors** that are related to content creation and edition in different formats, and self-expression through digital means. • **propose new** ideas and processes to the field.

DIMENSION 4 • **EXAMPLES OF KNOWLEDGE, SKILLS AND ATTITUDES**

NEW IN 2.2

KNOWLEDGE

118. Knows that digital content exists in a digital form and that there are many different types of digital content (e.g. audio, image, text, video, applications) that are stored in various digital file formats.
119. Knows that AI systems can be used to automatically create digital content (e.g. texts, news, essays, tweets, music, images) using existing digital content as its source. Such content may be difficult to distinguish from human creations. (AI)
120. Aware that "digital accessibility" means ensuring that everyone, including people with disabilities, can use and navigate the internet. Digital accessibility includes accessible websites, digital files and documents, and other web-based applications (e.g. for online banking, accessing public services, and messaging and video-calling services). (DA)
121. Aware that virtual reality (VR) and augmented reality (AR) allow new ways to explore simulated environments and interactions within the digital and physical worlds.

SKILLS

122. Can use tools and techniques to create accessible digital content (e.g. add ALT text to images, tables and graphs; create a proper and well-labelled document structure; use accessible fonts, colours, links) following official standards and guidelines (e.g. WCAG 2.1 and EN 301 549). (DA)
123. Knows how to select the appropriate format for digital content according to its purpose (e.g. saving a document in an editable format vs one that cannot be modified but is easily printed).
124. Knows how to create digital content to support one's own ideas and opinions (e.g. to produce data representations such as interactive visualisations using basic datasets such as open government data).
125. Knows how to create digital content on open platforms (e.g. create and modify text in a wiki environment).
126. Knows how to use Internet of Things (IoT) and mobile devices to create digital content (e.g. use embedded cameras and microphones to produce photos or videos).

ATTITUDES

127. Inclined to combine various types of digital content and data to better express facts or opinions for personal and professional use.
128. Open to explore alternative pathways to find solutions to produce digital content.
129. Inclined to follow official standards and guidelines (e.g. WCAG 2.1 and EN 301 549) to test the accessibility of a website, digital files, documents, e-mails or other web-based applications that one has created. (DA)

1 PROFESINIS AKTYVUMAS

1.1 Bendravimas organizacijoje

1.2 Profesinis bendradarbiavimas

1.3 Praktikos refleksija

1.4 Skaitmeninis CPD

1 PROFESSIONAL ENGAGEMENT

1.1 Organisational communication

1.2 Professional collaboration

1.3 Reflective practice

1.4 Digital CPD

Profesinis aktyvumas

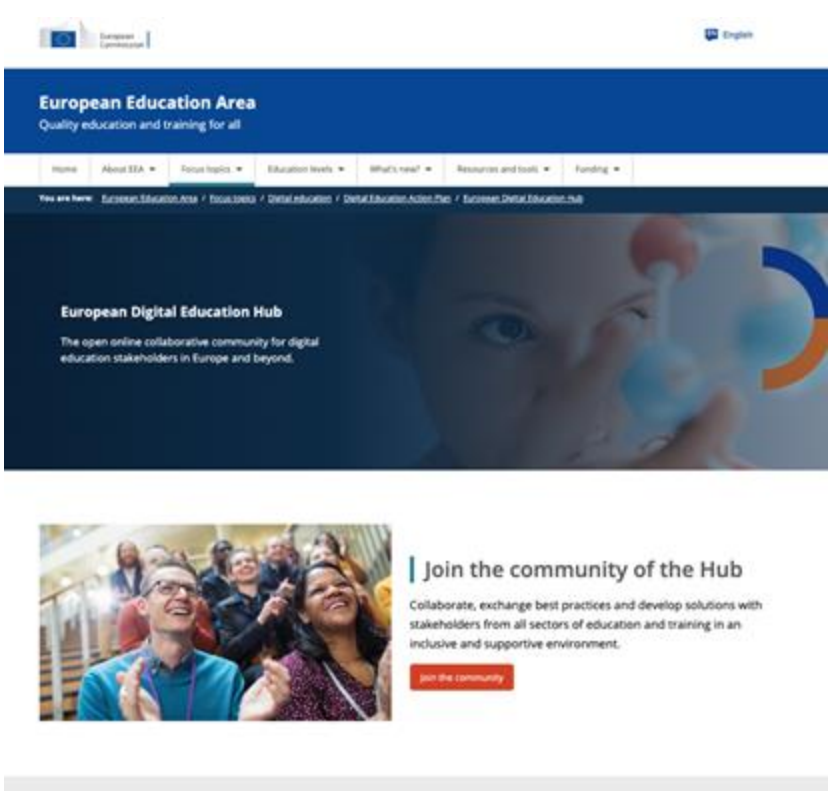
Bendravimas organizacijoje

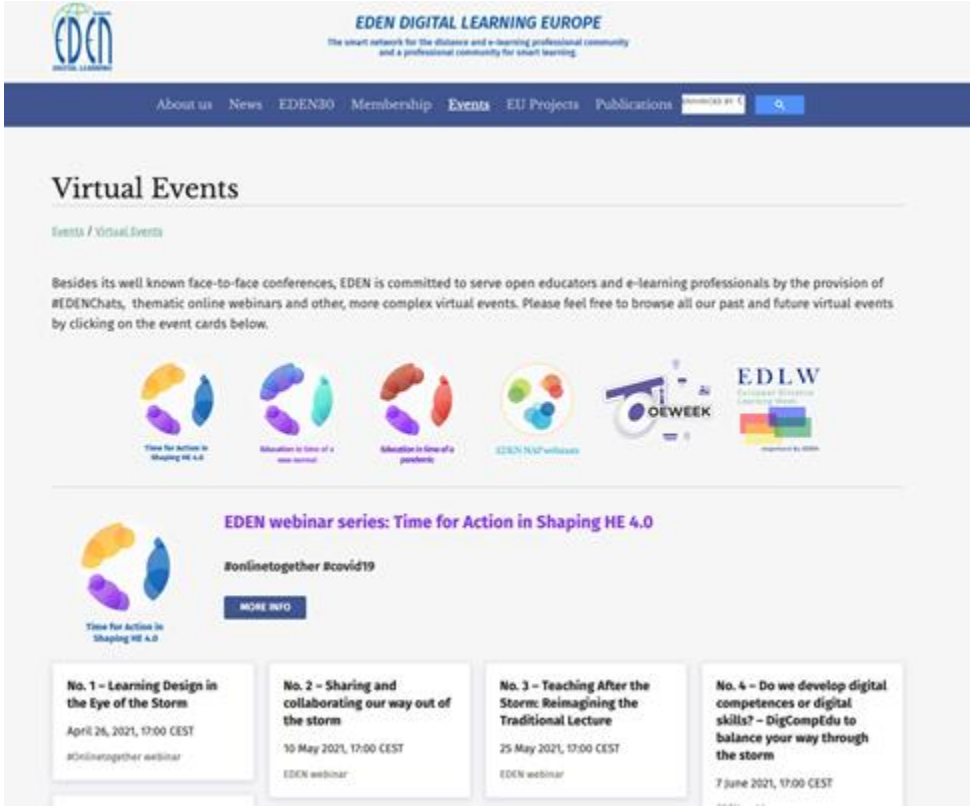
Profesinis bendradarbiavimas

Praktikos refleksija

Skaitmeninis tęstinis profesinis tobulinimas (TPT)

https://education.ec.europa.eu/focus-topics/digital-education/action-plan/european-digital-education-hub





PLTs Synchronous, blended & online education

Invitation to peer learning trajectories on digital teaching and learning in higher education

Peer learning trajectories stimulate the sharing of knowledge, ideas and experiences and mutual learning on digital educatio
training. You can participate in three online peer learning trajectories:

- **Synchronous hybrid teaching and learning** (KU Leuven)
- **Blended Teaching and Learning** (TU Delft, Dublin City University)
- **Online and distance education** (Universitat Oberta de Catalunya, Open University of the Netherlands, and Uninettuno)

Timetable

Although the first session of each trajectory has already been organized in December 2022, you are welcome to join the two
January and February 2023. Each session contains a two-hour module that connects to each other.

Synchronous hybrid teaching and learning (KU Leuven):
17th of January 2023, 13:00-15:00 CET
31stof January 2023, 10:00-12:00 CET

Blended Teaching and Learning (Delft University, Dublin City University)
19th of January 2023,12:30-14:30 CET
8th of February 2023,11:30-13:30 CET

Online and distance education (Universitat Oberta de Catalunya, Open University of the Netherlands, Uninettuno)
18th of January 2023,15:00-17:00 CET
7th of February 2023,9:30-11:30 CET

Registration

You can register via this registration form. The access link will be shared with you by e-mail.

See less

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ABOUT ISSUES SERVICES

Learning & Teaching Thematic Peer Groups

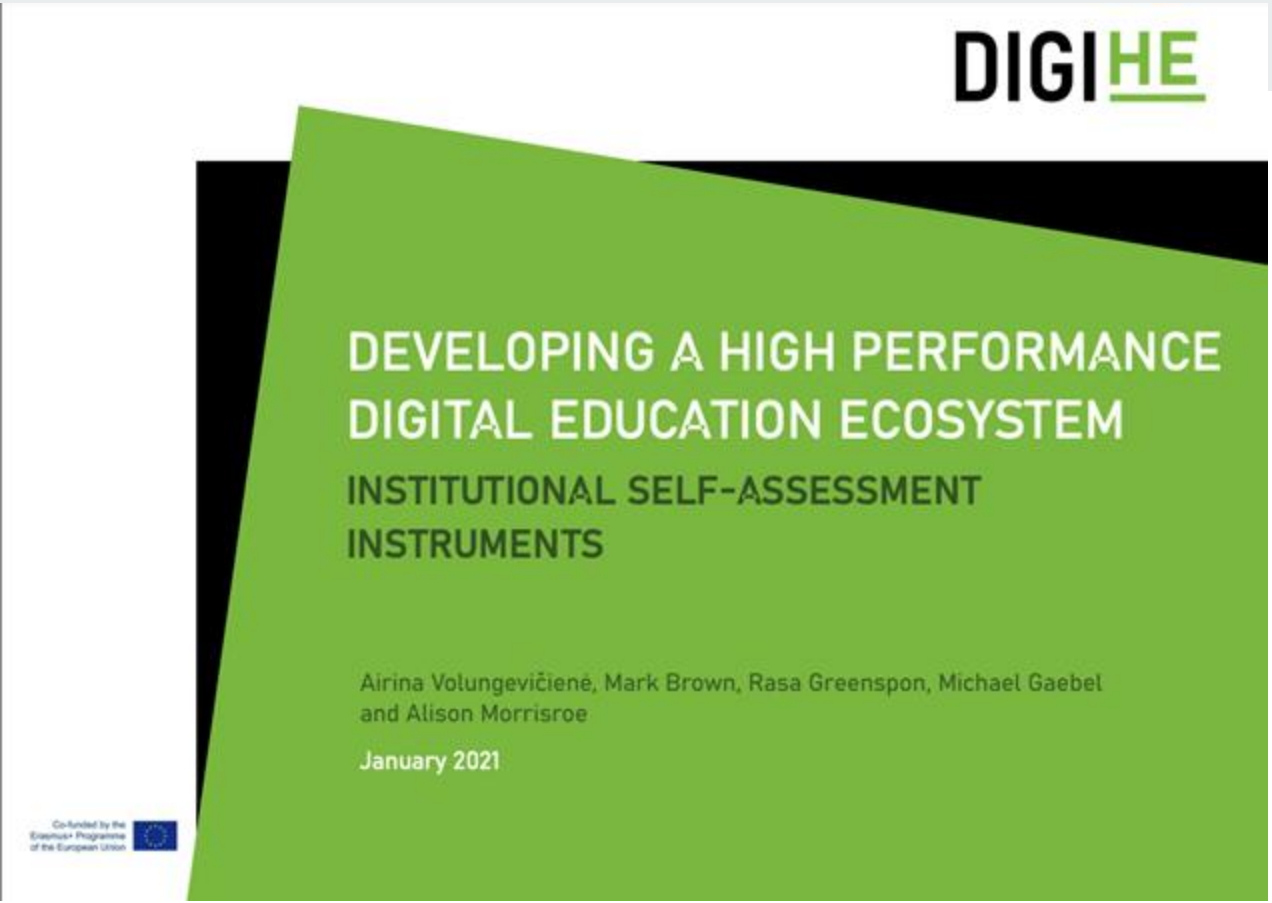
The EUA Learning & Teaching Thematic Peer Groups gather a selected group of EUA member universities each year to discuss and explore practices and lessons learnt in organising and implementing learning and teaching at the institutional level. They also identify good practices on the given theme. The groups are designed to strengthen a bottom-up approach in engaging European universities, to foster community building, and to complement the European Learning & Teaching Forum.

Further information about the 2022 Thematic Peer Groups is available in this document.

Summary reports on the lessons learnt by previous Thematic Peer Groups are available via the following links:

2021

- International partnerships
- Curriculum and assessment
- Strategy and organisational culture



https://eua.eu/downloads/publications/digi-he%20desk%20research%20report.pdf

DIGIHE eua EUROPEAN UNIVERSITY ASSOCIATION

https://eua.eu/downloads/publications/eua%20tpg%20report_%20strategy%20and%20organisational%20culture.pdf

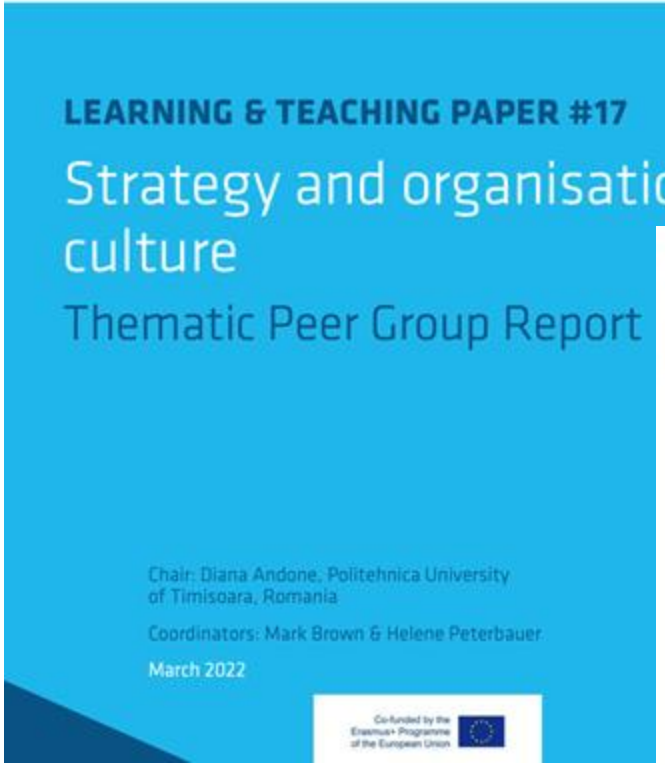


Table 1 - Summary of top institutional challenges and actions taken by group members to address individual institutional challenges

DOMAIN	CHALLENGE	ACTION
Vision, leadership and governance	• Establishing the current state of practice, how to develop the right type of strategy and rethink teaching approaches for best practices • Promoting leadership, quality assurance and self-assessment • Defying delivery modes and exploring partnerships • Ensuring quality and revising the quality assurance framework to support new models	**Re-envisioning the future of examinations** Written exams were previously held in rented rooms at other higher education institutions. As a result of the pandemic, there are now many fundamental questions about what requirements are attached to an exam and what the students' performance actually consists of. As a result of this cultural change, new concepts are now being experimented with. This means that institutionalised structures are also concerned with why traditions endure and how other forms of learning and assessment can be made possible. *FernUniversität in Hagen, Germany*

Tarptautinės rekomendacijos

https://eua.eu/resources/publications/1009:learning-teaching-thematic-peer-groups-2021.html

Curriculum and assessment

Learning & Teaching Paper #16

Stephen Rutherford, Thérèse Zhang

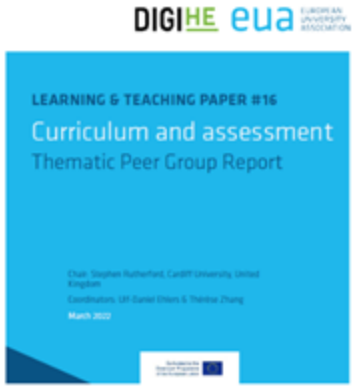
This report outlines the conclusions of the Learning & Teaching Thematic Peer Group "Curriculum and assessment", which examined how to embed digitally enhanced learning and teaching (DELT) and digital technologies in the curriculum, and how to design and manage coherent digital assessment so that it truly reflects intended learning outcomes, is engaging, diverse, high quality, and aligned with the curriculum.

This report highlights the multiple facets of curriculum and assessment in a digital environment, as well as challenges met by higher education institutions across Europe – such as reaching equity for all students, designing effective institutional strategies to embed DELT into curriculum, supporting teachers in experimenting and innovating with digital teaching, embedding assessment as integral part of curriculum, and developing students' and teachers' assessment literacy.

The report also provides recommendations to H
the pandemic context but also beyond it. The g
"Supporting European universities in their strate
project and EUA's Learning & Teaching activities

Co-funded by the Erasmus+ Programme of the European Union

The DIGI-HE
Programme
the views o
held respon
information



Challenge #1

The pandemic has magnified existing challenges, with a specific focus on the overall question of equity across the board.

- Can DELT really be the same experience for all, and any, student(s)? In particular, how can institutions address digital poverty, and make all learning materials accessible to all students?
- This need for equity relates to issues of inclusion: what flexibility would there be for students – could they choose the way they want to take the course (online, on site, blended, hybrid) and be assessed? Will it even be possible for a HEI to offer flexibility in each course? What happens if some students have more difficulties than others in using or accessing the same tools or resources?

“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

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: New EU rules needed to address digital addiction | News | European Parliament (europa.eu)

“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

European Commission

EN English

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European Education Area

Quality education and training for all

Home | About EEA | Focus topics | Education levels | What's new? | Resources and tools | Funding | Testimonials

You are here: Home / 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.

What is the EU doing on digital education?

Digital Education Action Plan

The 2021-2027 Digital Education Action Plan is the Commission's flagship digital education policy initiative.

European Digital Education Hub

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

Free self-reflection tools

Self-reflection tools on digital competences in education: SELFIE, SELFIE for TEACHERS and SELFIE for work-based learning.

DEAP 2021-2027

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Fostering the development of a high-performing digital education ecosystem

Structured dialogue

Identifying common challenges EU countries face and ways to overcome them

Enabling factors for success

Promoting the necessary structural reforms at national level in EU countries

Blended learning approaches

High-quality and inclusive education in primary and secondary schools

Digital education content framework

Addressing the current challenges of EU countries in digital transformation

Connectivity and digital equipment

Enhancing access to high-speed internet for schools

Digital transformation plans

Support, resources and guidance at national level for education and training institutions

Ethical guidelines on AI

Practical tips for primary and secondary teachers on using artificial intelligence

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Enhancing digital skills and competences for the digital transformation

Guidelines to foster digital literacy and tackle disinformation

Hand-on guidance for primary and secondary teachers

Updating the European Digital Competence Framework

The inclusion of skills related to AI and use of data

Digital Skills Certificate

A path towards certified digital skills across Europe

Improving the provision of digital skills

Empowering Europeans to develop the digital competences they need

Measuring student digital skills

Compare, analyse and set competence targets to strengthen evidence-based policy development across the EU

Digital Opportunity Traineeships

Boost ICT talent in the EU

Women in STEM

Empowering young women to develop digital and entrepreneurial skills

European Digital Education Hub

The online community for digital education enthusiasts

European Commission

English

Register of Commission Expert Groups and Other Similar Entities

Home | Expert Groups | Meetings | Members | Calls for application | News

Register of Commission Expert Groups > Expert Groups > Details

GROUP | E03787

Working Group on Digital Education: Learning, Teaching and Assessment (DELTA) (E03787)

ACTIVE

Subscribe to this gro

Print as PDF

Details | Additional Information | Meetings | Subgroups | Members | Statistics

Abbreviation
DELTA

Lead DG
- EAC - DG Education and Culture

Type
- Informal
- Temporary

Mission
The overall objective of the Working Groups is to promote mutual learning on policy reform of national education systems with a view to effectively contributing to the achievement of the European Education Area by 2025, and as relevant, the Digital Education Action Plan (2021-2027) through tangible outputs. the outputs of the Working Groups should help implement European cooperation in education and training in an inclusive, holistic and lifelong learning perspective, especially through i) promoting mutual learning on policy reform of national education and training systems ii) contributing, through expert work, to the implementation of the relevant initiatives iii) reinforcing synergies between education and training and other EU policies and funding

Terms of reference
Terms of reference

Publication on the register of expert groups
03 August 2021

Contact
EAC-WG-DELTA@ec.europa.eu

Policy Area
- Education

Associated DG
-

Scope
- Limited

Task
- Assist the Commission in the preparation of legislative proposals and policy initiatives
- Coordinate with Member States, exchange of views

Link to Website
-

Last updated
23 May 2023

European Education Area

Quality education and training for all

Home | About EEA | Focus topics | Education levels | What's new? | Resources and tools | Funding

You are here: European Education Area / Focus topics / Digital education / Tools for schools and educators

Digital education: free self-reflection tools

The self-reflection tools on digital competences in Education SELFIE (including WBL module) and SELFIE for TEACHERS are run by the European commission and available for free in all EU official languages.

Free tools for schools and teachers

SELFIE

How can your school improve how it uses technology for teaching and learning?

Use the SELFIE tool to find out

SELFIE for work-based learning

Are you working in a Vocational Education and Training (VET) institution and/or training company?

Use SELFIE for work based learning

SELFIE for TEACHERS

Are you a teacher? Learn more about and further develop your digital competence.

Use SELFIE for TEACHERS


Europos Komisija
DIRBTINIO INTELEKTO (DI) IR DUOMENŲ NAUDOJIMO MOKYMO IR MOKYMOSI SRITYJE ETIKOS GAIRĖS PEDAGOGAMS


Europos Komisija
Kritinis mąstymas
Skaitmeninė pilietybė
Faktų tikrinimas
Įgalėjimas
Vertinimas
Skaitmeninis pėdsakas
Kovos su dezinformacija ir skaitmeninio raštingumo skatinimo per švietimą ir mokymą gairės mokytojams ir ugdytojams

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

EUROPEAN COURT OF AUDITORS

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

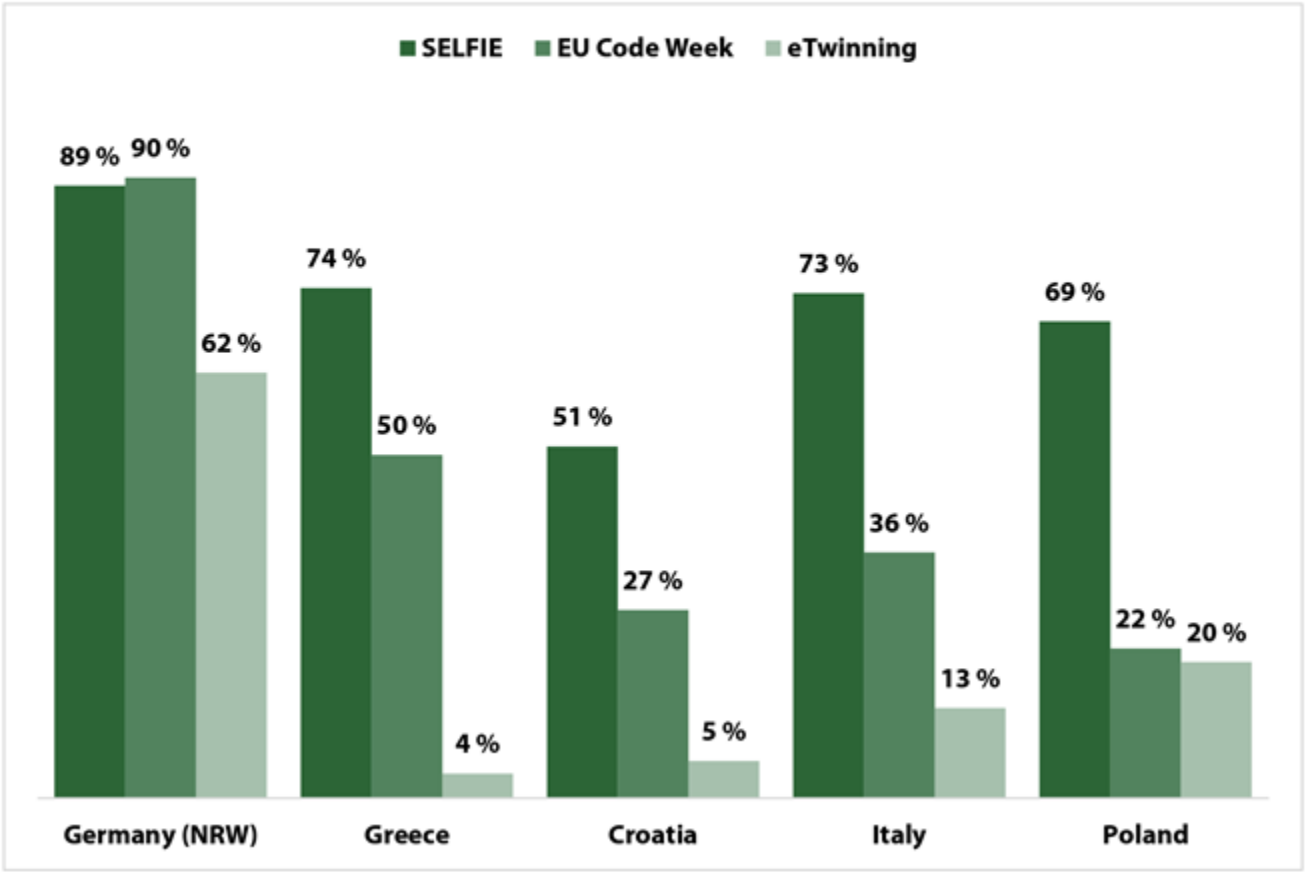
PRIORITY 1 – Fostering the development of a high-performing digital education ecosystem

- Launch a **strategic dialogue with member states** to facilitate successful digital education
- Make recommendations for **online/distance learning** in primary and secondary education
- 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
- Launch a **Connectivity4Schools** initiative and encourage **member states'** uptake of EU support for broadband, internet access and digital tools such as **SELFIE for Teachers**
- Develop **ethical guidelines on artificial intelligence (AI) and data usage** in teaching and learning

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

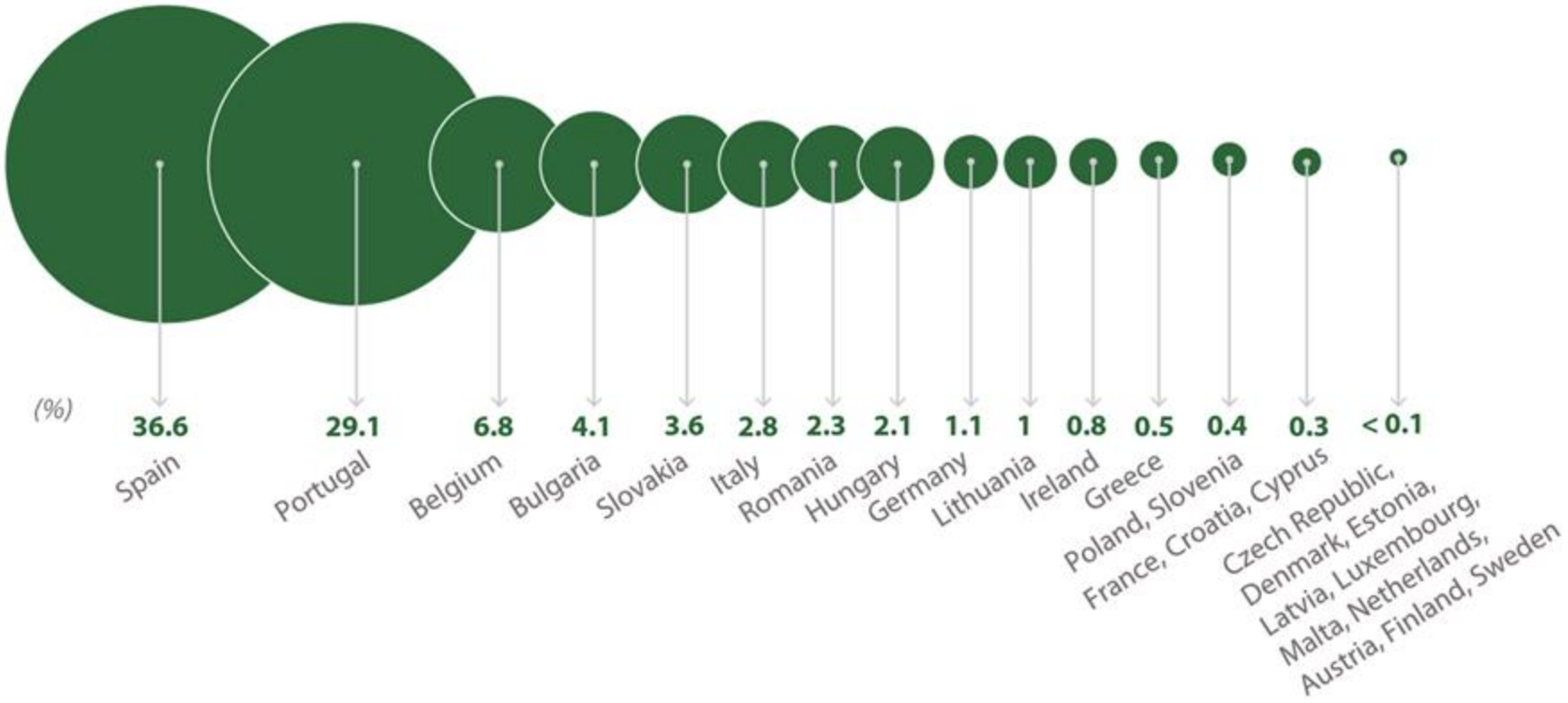
- Develop **common guidelines to foster digital literacy** and **fight disinformation**
- Include AI and digital skills in **the European Digital Competence Framework**; support the development of **artificial intelligence learning resources** for education and training providers
- Develop a **European Digital Skills Certificate** recognised by governments, employers and other stakeholders across Europe
- Make recommendations **on improving digital skills provision** and introduce an **EU target for student digital competence**
- 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

Figure 5 – Share of surveyed schools not aware of selected Commission actions supporting the digitalisation of schools



Source: ECA survey.

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



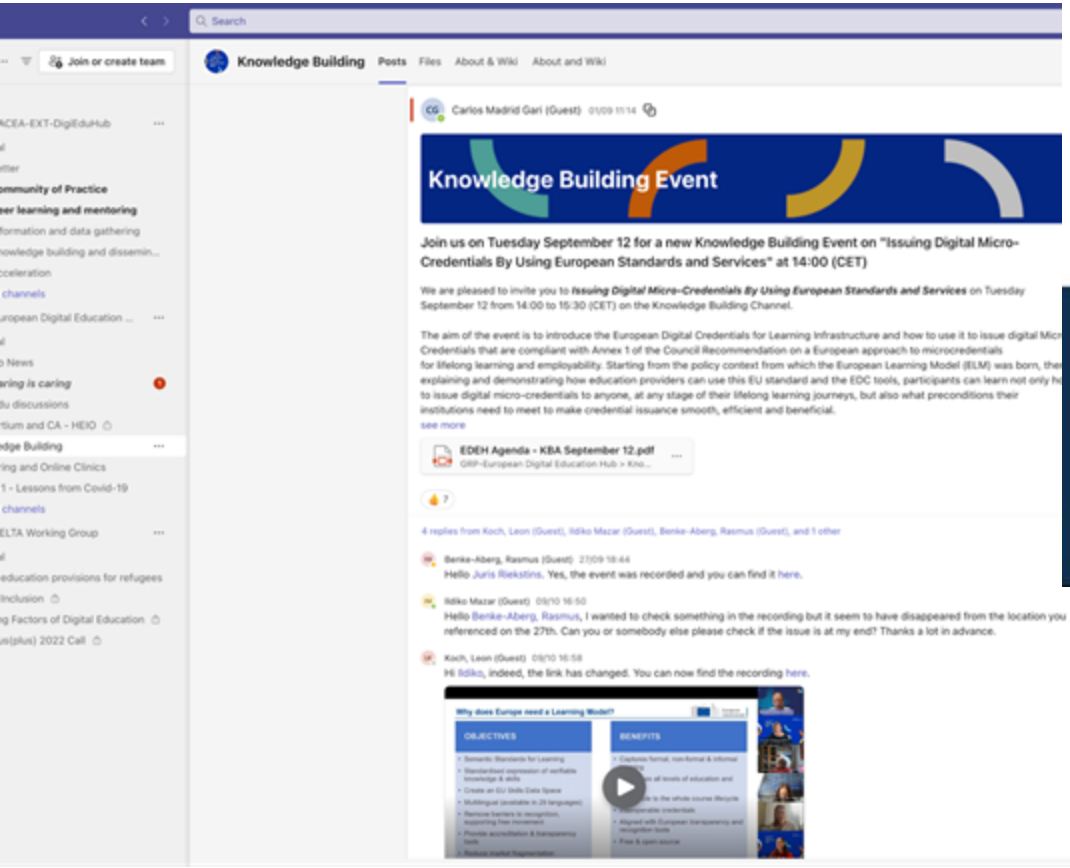
Source: ECA based on Commission and Eurostat data.

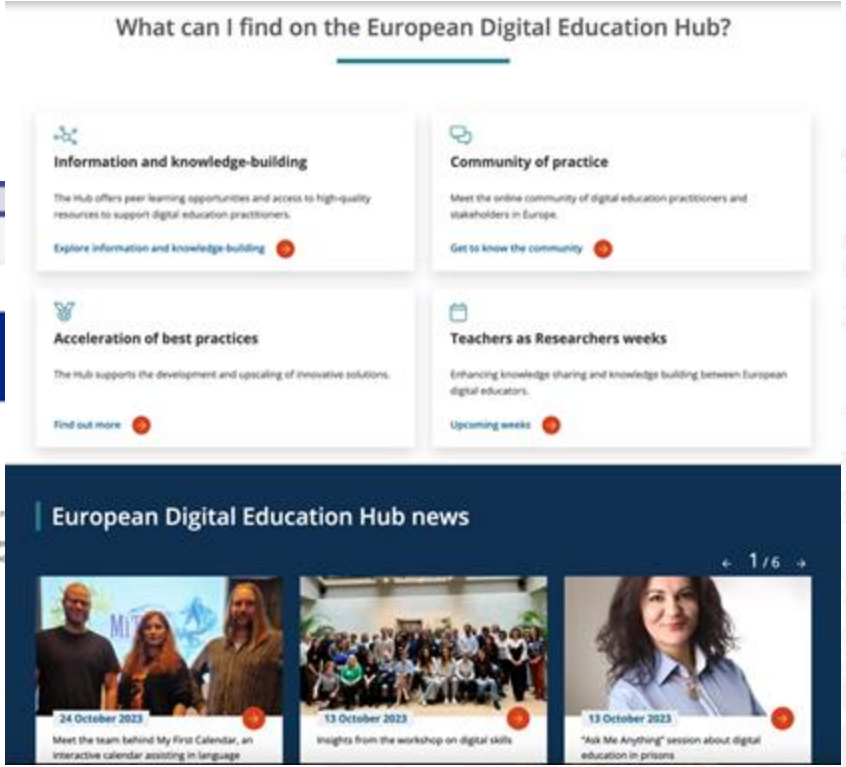
European Commission

Join European Digital Education Hub

Mentorship and Clinics
Knowledge Building Activities
Accelerator
Reading Corner

… and much more!


Search
Join or create team
Knowledge Building
Posts
Files
About & Wiki
About and Wiki
Carlos Madrid Gari (Guest) 01/09 11:14
Knowledge Building Event
Join us on Tuesday September 12 for a new Knowledge Building Event on "Issuing Digital Micro-Credentials By Using European Standards and Services" at 14:00 (CET)
We are pleased to invite you to Issuing Digital Micro-Credentials By Using European Standards and Services on Tuesday September 12 from 14:00 to 15:30 (CET) on the Knowledge Building Channel.
The aim of the event is to introduce the European Digital Credentials for Learning Infrastructure and how to use it to issue digital Micro Credentials that are compliant with Annex 1 of the Council Recommendation on a European approach to microcredentials for lifelong learning and employability. Starting from the policy context from which the European Learning Model (ELM) was born, the explaining and demonstrating how education providers can use this EU standard and the EDC tools, participants can learn not only ho to issue digital micro-credentials to anyone, at any stage of their lifelong learning journeys, but also what preconditions their institutions need to meet to make credential issuance smooth, efficient and beneficial.
see more
EDEH Agenda - KBA September 12.pdf
4 replies from Koch, Leon (Guest), Ildiko Mazar (Guest), Benke-Aberg, Rasmus (Guest), and 1 other
Benke-Aberg, Rasmus (Guest) 27/09 18:44
Hello Juris Riekstins. Yes, the event was recorded and you can find it here.
Ildiko Mazar (Guest) 09/10 16:50
Hello Benke-Aberg, Rasmus, I wanted to check something in the recording but it seem to have disappeared from the location you referenced on the 27th. Can you or somebody else please check if the issue is at my end? Thanks a lot in advance.
Koch, Leon (Guest) 09/10 16:58
Hi Ildiko, indeed, the link has changed. You can now find the recording here.
Why does Europe need a Learning Model?
OBJECTIVES
BENEFITS


What can I find on the European Digital Education Hub?
Information and knowledge-building
The Hub offers peer learning opportunities and access to high-quality resources to support digital education practitioners.
Explore information and knowledge-building
Community of practice
Meet the online community of digital education practitioners and stakeholders in Europe.
Get to know the community
Acceleration of best practices
The Hub supports the development and upscaling of innovative solutions.
Find out more
Teachers as Researchers weeks
Enhancing knowledge sharing and knowledge building between European digital educators.
Upcoming weeks
European Digital Education Hub news
1 / 6
24 October 2023
Meet the team behind My First Calendar, an interactive calendar assisting in language
13 October 2023
Insights from the workshop on digital skills
13 October 2023
"Ask Me Anything" session about digital education in prisons

Speaker
Viktoriya Rastorguyeva

Vytautas Magnus University, Lithuania

Speaker
Eduarda Fedlukova

Vytautas Magnus University, Lithuania

Speaker
Aušra Rutkienė

Vytautas Magnus University, Lithuania

Speaker
Daiva Urmonienė

Vytautas Magnus University, Lithuania

Speaker
Živilė Vasiliauskė

SIF, Social Innovation Fund, Lithuania

Speaker
Renato Opperti

UNESCO IBE

Speaker
Estela Daukšienė

Vytautas Magnus University

Speaker
Elena Trepulė

EDEN Digital Learning Europe

Moderator
Stefanija Ališauskienė

Vytautas Magnus University, Lithuania

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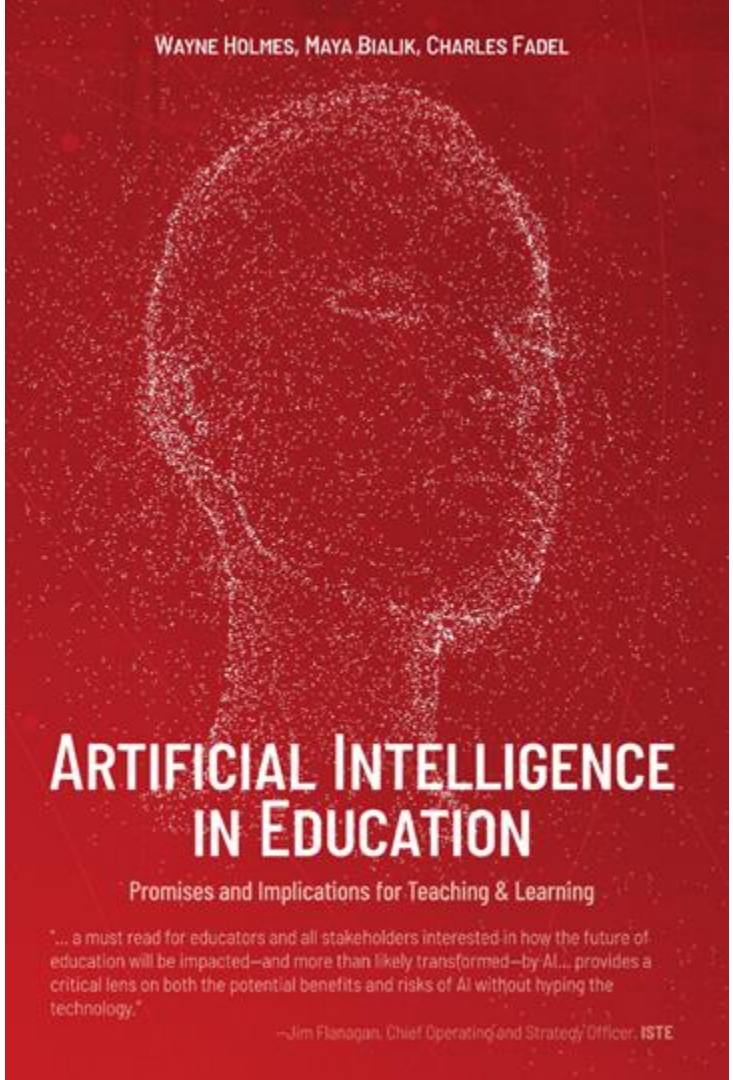


While we may have some limited knowledge or experience of mainstream AI, either from the media or in our daily lives, for many the use of AI in education remains a mystery. A multitude of yet-to-be-answered questions spring to mind. How exactly can AI work in classrooms, and what can be achieved? With AI requiring so much data, how is student privacy maintained? What will be AI's long-term effects on teacher roles? Are the proponents of AIED promising more than can be delivered? What is the impact of AI on student agency and outcomes? And what are the social and ethical consequences?

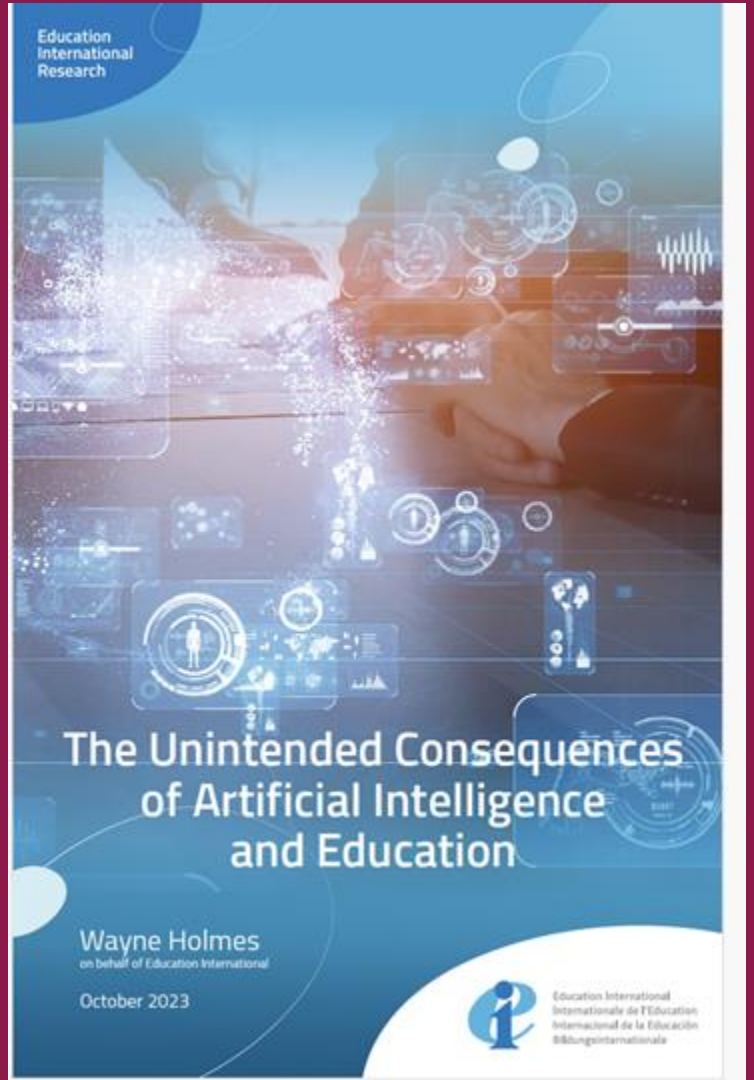
p.p. 81-82

https://www.aupress.ca/books/120290-25-years-of-ed-tech

2016

The Return of Artificial Intelligence

Artificial intelligence (AI) is an interesting case study in ed tech, combining several themes that have already arisen in this book: promise versus reality, the cyclical nature of ed tech, and the increasingly thorny ethical issues raised by its application. The possibilities of AI in education saw an early burst of enthusiasm in the 1980s, particularly with the concept of Intelligent Tutoring Systems (ITS). This initial enthusiasm waned somewhat in the 1990s. This was mainly because ITS only worked for very limited, tightly specified domains. Developers needed to predict the types of errors people would make in order to provide advice on how to rectify these. And in many subjects (the humanities in particular), it transpired that people could be very creative in the errors they made, and more significantly, what constituted the right answer was less well defined. For example, in their influential paper, Anderson, Boyle, and Reiser (1985) detailed intelligent tutoring systems for geometry and the programming language LISP (derived from "list processor"). They confidently predicted that "cognitive psychology, artificial intelligence, and computer technology have advanced to the point where it is feasible to build computer systems that are as effective as intelligent human tutors" (p. 456).



So, what exactly is AI? AI is a field of computer science that emerged from the field of cybernetics (the study of control and communication in living organisms and machines) and that seeks to develop intelligent machines. This is usually taken to mean machines that are capable of performing tasks that would typically require human intelligence. AI was named by the computer scientist John McCarthy at a workshop held in 1956 at Dartmouth College (a US Ivy League research university). However, since then, AI has been defined in multiple ways, often by and for computer scientists in ways that are challenging for non-experts to understand. A simple definition for non-experts is provided by the online Oxford English Dictionary:

> *The capacity of computers or other machines to exhibit or simulate intelligent behaviour.*

This definition is helpful because it does not depend entirely on data (Holmes & Porayska-Pomsta, 2023). While it does accommodate the data-driven AI techniques that have led to the dramatic recent developments, it can also include symbolic AI (an earlier knowledge-based approach that is still used in many AI applications in education) and any new paradigm of AI that might emerge in future years. However, it does not reference the role of humans, which is important given the critical role of humans at all stages of the AI development pipeline (including setting the objectives, collating and cleaning the data, choosing the algorithms, evaluating the outputs, aligning with human values, and so on). Finally, while it does distinguish by omission

As the University of Oxford Associate Professor Carissa Véliz writes:

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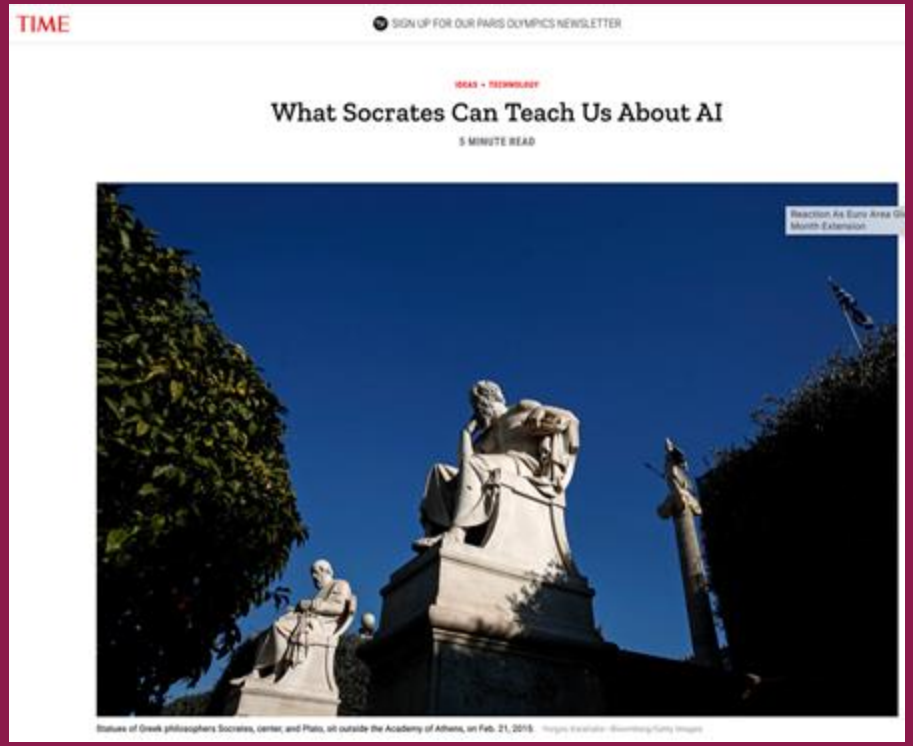
> *"Large language models [which is the technology behind text GenAI] are the ultimate bullshitters because they are designed to be plausible (and therefore convincing) with no regard for the truth."* [2]



https://time.com/6299631/what-socrates-can-teach-us-about-ai/

https://time.com/6299631/what-socrates-can-teach-us-about-ai/

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Large language models don't inform users that they are making statistical guesses. They present incorrect guesses with the same confidence as they present facts. Whatever you ask, they will come up with a convincing response, and it's never "I don't know," even though it should be. If you ask ChatGPT about current events, it will remind you that it only has access to information up to September 2021 and it can't browse the internet. For almost any other kind of question, it will venture a response that will often mix facts with confabulations.

The philosopher Harry Frankfurt famously argued that bullshit is speech that is typically persuasive but is detached from a concern with the truth. Large language models are the ultimate bullshitters because they are designed to be plausible (and therefore convincing) with no regard for the truth. Bullshit doesn't need to be false. Sometimes bullshitters describe things as they are, but if they are not aiming for the truth, what they say is still bullshit.

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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

6

Competence areas in DigComp

Competences for teaching *for* AI

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

Competences for teaching *about* AI

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

Some considerations by speakers

The amount of energy being used by AI within the next few years to be roughly the equivalent of an entire country the size of the Netherlands

Microsoft's water consumption 6.4 million cubic metres – 2,500 Olympic swimming pools.

ChatGPT's model has been estimated to have emitted as much CO2 as driving a car to the moon and back

And at the same time,

our increasing reliance on AI means that the whole world is becoming increasingly reliant on a small number of big tech companies, over which we have no democratic control.

So, AI is amazing...

...but there are many challenges.

What is the aim of using AI in teaching and learning?

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How does the data received from AI contribute to the competence targeted by the learner?

Who learns and who demonstrates new knowledge, skills and attitudes?
If this is AI, then who I am?

LA as the grandfather of AI

© Holainsemar | Dreamstime.com

© Bekir Ugur | Dreamstime.com

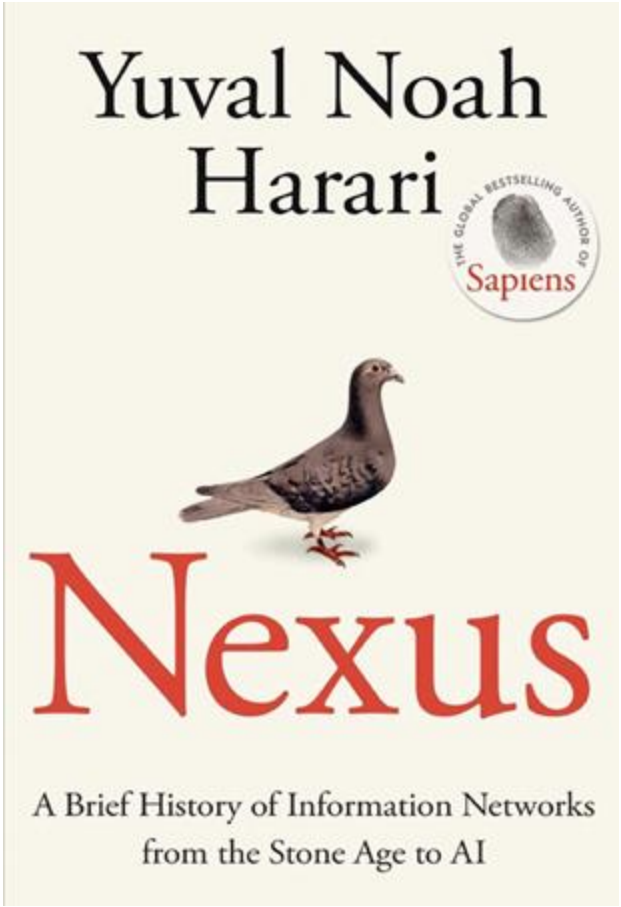
LA as the grandfather of AI

AI generated
https://iconscout.com/illustrations/horse-game

What are the significant factors in creating a high-quality online learning experience from students' perspectives? (December 2, 2020)

1. Basic Online Modality (refers to the competent use of basic online class tools—online grading, navigation methods, online grade book, and the announcements function)
2. Instructional Support (refers to students' perceptions of techniques by the instructor used for input, rehearsal, feedback, and evaluation)
3. Teaching Presence (refers to students' perceptions about the quality of communication in lectures, directions, and individual feedback including encouragement)
4. Cognitive Presence (refers to the engagement of students such that they perceive they are stimulated by the material and instructor to reflect deeply and critically, and seek to understand different perspectives)
5. Online Social Comfort (refers to the instructor's ability to provide an environment in which anxiety is low, and students feel comfortable interacting even when expressing opposing viewpoints)
6. Online Interactive Modality (refers to the "high-end" usage of online functionality)
7. Social Presence (refers to students' perceptions of the quality of student-to-student interaction)

Van Wart, M., Ni, A., Medina, P. *et al.* Integrating students' perspectives about online learning: a hierarchy of factors. *Int J Educ Technol High Educ* **17,** 53 (2020). https://doi.org/10.1186/s41239-020-00229-8



Where the data comes from?

Who can access data and under what conditions?

What does access to data means to learning, teaching and assessment?

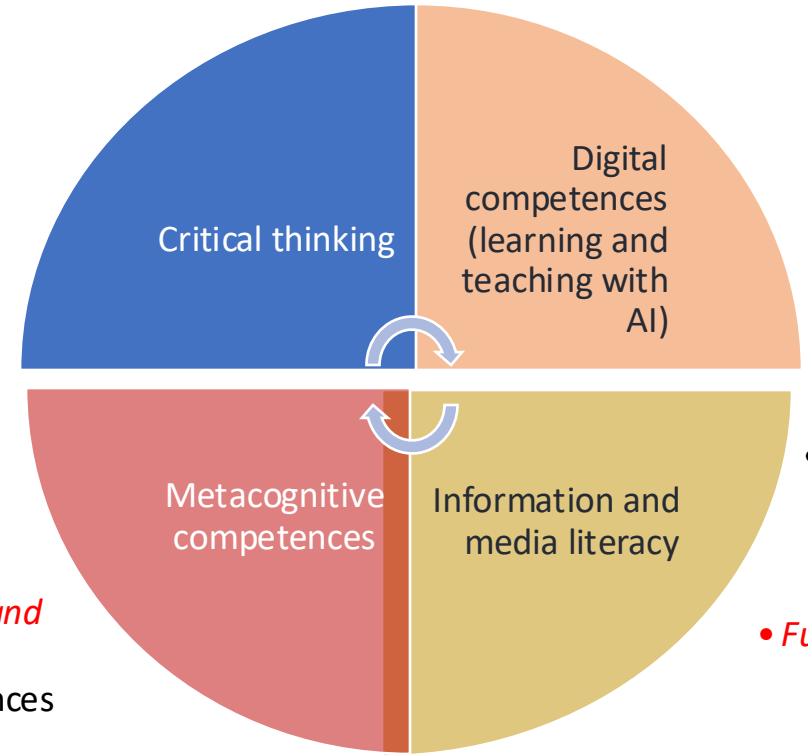
What do we know about the data we are learning and teaching from?

For AI - LLM are used, and language is directly related with our thinking and talking and acting - LINKS!

Which LLM does AI tool use to support our learning, teaching, thinking and speaking?

New challenges raised by responsible use of AI

- XAI – explainable AI
- LLM origin
- *Epistemology*
- Socio-economic impact, etc.



- Teaching with AI
- XAI - *aware about the source and resource*
- learning with AI
- learning design with AI

- Establish *awareness about learning with AI*
- *Manage awareness through personal cognitive decisions*
- Stay *aware of comprehension and task performance*
- Apply metacognitive competences for assessing process and outcomes

- Where does it come from?
- XAI
- Individual's academic reputation
- *Fundamental vs co-developed knowledge*

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REKTORIUS

ĮSAKYMAS
DĖL NUOTOLINIŲ STUDIJŲ DALYKŲ KOKYBĖS EKSPERTINIO VERTINIMO DARBO GRUPĖS SUDĖTIES KEITIMO

2020 m. balandžio 15 d. Nr. 214
Kaunas

1. Atsižvelgdamas į 2020 – 04 – 15 teikimą, k e i č i u 2019 m. rugsėjo 4 d. įsakymą Nr. 601 „Dėl nuotolinių studijų dalykų ekspertinio vertinimo darbo grupės sudėties keitimo“ suformuotą nuotolinių studijų dalykų kokybės ekspertinio vertinimo darbo grupės sudėtį, į šią darbo grupės sudėtį:

Ši veikla - tai didžiausią pridėtinę vertę sukūrusi inovacija VDU - bendruomenės augimui,
skaitmeninių kompetencijų plėtojimui,
Nuotolinių studijų kokybės užtikrinimui
skaitmeninių inovacijų eksperimentavimui