

# European project POWERHEAD

# Empowering Higher Education in Adopting Digital Learning

Report of the Peer Learning Activity

April 2022

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#### **Report of the Peer Learning Activity**

#### 1 Agenda

#### 1.1 Tuesday 22 February 2022

#### 13.00 – 13.10h Welcome and introduction to the project

Magalie Soenen, project coordinator

#### **13.10 – 13.30h Setting the scene**

Presentation of the background paper by Tine Degrande, Flemish Education Council

Presentation of the common needs analysis by Daiga Ivsiņa, Ministry of Education and Science, Latvia

# 13.30 – 14.30h Digitalisation in higher education: experiences from European countries part 1: Greece and Germany

Yiannis Katsanevakis, Ministry of Education, Greece Demetrios Sampson, University of Piraeus

Alexander Knoth, DAAD Oliver Janoschka, Hochschulforum Digitalisierung Kornelia Freitag, Ruhr-University Bochum

#### **Break (30<sup>1</sup>)**

# 15.00 – 16.30h Digitalisation in higher education: experiences from European countries part 2: Ukraine, Ireland and Hungary

Kateryna Suprun, Ministry of Education, Ukraine Oleksii Molchanovskyi, Ukrainian Catholic University

Sharon Flynn, Irish Universities Association (IUA)

Laura Sinóros-Szabó, Ministry for Technology and Innovation Roland Szilágyi, University of Miskolc

#### 16.30 – 17.30h Exchange in three break-out groups





#### 1.2 Wednesday 23 February 2022

9.30 - 10.00h Reporting break-out groups

Report by the three rapporteurs

10.00 – 10.30h Digitalisation in higher education from an international

perspective: presentation DEAP

Chrystalla Petridou, European Commission

10.30 – 11.00h Presentation of a current good practice: the acceleration plan in the

**Netherlands** 

Johanna de Groot, project leader acceleration plan Netherlands

**Break (30<sup>-</sup>)** 

11.30 – 12.00h The student perspective

Ruben Janssens, European Students' Union

12.00 - 12.45h Preparing the road ahead

12.45 - 13.00h Closing

Magalie Soenen, project coordinator





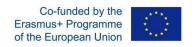
### 2 Participants

Name	Organisation	Country				
Iļja Afanasjevs	Riga Business School within Riga Technical University, Information Technology Manager	Latvia				
Linda Daniela	University of Latvia	Latvia				
Johanna de Groot	SURF, Acceleration plan	the Netherlands				
Isabelle De Ridder	Belgium					
Carine De Smet	Flemish Education Council (project partner)	Belgium				
Tine Degrande	Flemish Education Council (project partner)	Belgium				
Sharon Flynn	Irish Universities Association (IUA)	Ireland				
Kornelia Freitag	Ruhr-University Bochum	Germany				
Piet Henderikx	European Association of Distance Teaching Universities (EADTU)	Belgium				
Daiga Ivsiņa	Latvian Ministry of Education and Science (project partner)	Latvia				
Oliver Janoschka	Hochschulforum Digitalisierung	Germany				
Dace Jansone	Latvian Ministry of Education and Science	Latvia				
Ruben Janssens	European Students' Union (ESU)	Belgium				
Yiannis Katsanevakis	Greek Ministry of Education & Religious Affairs	Greece				
Alexander Knoth	DAAD	Germany				
Brigita Kukjalko	Latvian Ministry of Education and Science	Latvia				
Liene Levada	Latvian Ministry of Education and Science (project partner)	Latvia				
Oleksii Molchanovskyi	Ukrainian Catholic University	Ukraine				
Chrystalla Petridou	European Commission, DG EAC					
Demetrios Sampson	University of Piraeus	Greece				
Jolanta Silka	Quality Agency for Higher Education	Latvia				
Laura Sinóros-Szabó	Ministry for Innovation and Technology	Hungary				
Magalie Soenen	Flemish Community, Department Education and Training (project partner)	Belgium				



Pieter Soete	Accreditation Organisation of the Netherlands and	Belgium			
	Flanders (NVAO)				
Kateryna Suprun	Ministry of Education and Science of Ukraine	Ukraine			
Roland Szilágyi	University of Miskolc	Hungary			
Lāsma Ulmane-	Liepaja University, Assistant Professor, Institute of	Latvia			
Ozoliņa,	Educational Sciences, Researcher				
Cis Van Den Bogaert	University of Antwerp	Belgium			
Patrick Van den	VLUHR-QA	Belgium			
Bosch					
Janina van Hees	Project manager Virtual Campus of EuroTeQ European University.	the Netherlands			
Mariëlle van	Flemish Community, Department Education and Training	Belgium			
Heumen	(project partner)				
Erik Verhaar	European Commission, DG EAC	European			
		Commission, DG			
		EAC			





#### 3 Peer Learning Activity

#### 3.1 Context

#### 3.1.1 Introduction to the project

Magalie Soenen, chair of the PLA, welcomed everyone on behalf of the Flemish Department of Education and Training, and introduced herself as the project coordinator. She asked for permission to record the meeting for the purpose of the minutes only, and reminded everybody of the housekeeping rules for camera- and microphone-use during the meeting. She introduced the two-day PLA programme.

The POWERHEAD (Empowering Higher Education in Adopting Digital Learning) project was briefly introduced. The objective of the project is to design guidelines for a policy on digital learning in higher education (HE) at two levels: in national policy and at higher education institution (HEI) level. The planned activities in the project include an analysis of needs of actors in HE, a comparison/confrontation with other countries (this is the purpose of the current PLA) and the publication of guidelines.

The project has links to several European initiatives:

- Recovery plan
- Digital Education Action Plan
- European Education Area
- Rome Communiqué: 'innovative and interconnected' + Annex Learning and Teaching: 'foster continuous enhancement of teaching, especially digital'

The objective of the PLA was to share the different needs analyses of Flanders and Latvia and confront the findings with the experiences and views of experts of different EHEA-countries. This way it could be seen if the results of the project so far, are recognisable for other Bologna countries (who may be at different stages of the implementation of digital learning in higher education). The activity originally foresaw participation of peers from three other EHEA-countries. This was however extended, so that perspectives from 8 countries could be shared: Belgium, Germany, Greece, Hungary, Ireland, Latvia, the Netherlands and Ukraine. Two European Commission representatives were also present during the meeting.

#### 3.1.2 Background paper

Tine Degrande from the Flemish Education Council presented the background paper¹ that was prepared by the Flemish Working Group in February/March 2021 and that was presented and enriched during the Transnational Steering Group meeting on 31 March 2021. The general objectives of the background paper were to give an overview of insights on digitalisation in HE and to outline the current context of digitalisation in HE.

The project proposal was made before the COVID-19 pandemic. At that time, it was noted that digital learning was organised in an ad-hoc, haphazard way. The COVID-19 context has forced the rapid implementation of digital education at a large scale. However, many questions still remain, notably the role that digitalisation will play in HE in the long term. Therefore, a policy on digital learning in HE is still pertinent. Given this context, the key questions that need to be answered are:

- 1) what do institutions need from the government to develop a sustainable digitalisation policy?
- 2) how can institutions further shape their digitalisation policy?

The background paper identified a number of policy documents related to the work of the POWERHEAD project in the European, Flemish and Latvian contexts. These documents were analysed and this led to

<sup>&</sup>lt;sup>1</sup> Please refer to the background paper for more detail. The document can be found on the POWERHEAD website <a href="here">here</a>.





several reflections. First of all, there seems to be no real consensus on what digital learning and teaching involves and what it should look like. Secondly, despite the large number and variety of documents, many challenges and opportunities recur throughout the documents. Thirdly, some documents date back to some years ago, but many challenges still remain the same. Considering these reflections, the specific goals of the background paper were to define digital learning and teaching, list the opportunities, challenges and essential preconditions, and elaborate on next steps.

In the background paper, digital learning and teaching is defined as follows: "digitally enhanced learning and teaching is 'any type of learning or teaching that is accompanied or supported by technology' (Goebel et al., 2021). A broad definition was deliberately chosen, it can include different educational contexts and degrees of digitalisation. However, it is highlighted that the technology should be adequately integrated and be in the service of the learning and teaching.

Many opportunities of digitalisation in HE are identified. In teaching and learning, digitalisation has a role to support the design of quality education, promote student learning, motivate and connect with the world of students, contribute to inclusion, and support collaboration and exchange between teaching staff and students. At the same time, digitalisation can create benefits for the organisation of HE: it can prepare students for digital society, reach more and more diverse students, contribute to innovation in HE, strengthen participation of teachers and students, and allows possibilities to offer administrative support via digital platforms.

In spite of the many opportunities, digitalisation also brings along challenges and risks. For learning and teaching, we need to ensure learning remains education-driven instead of technology-driven and continue to keep in mind the importance of the teaching method besides educational technology; technology is not an end in itself. Furthermore, there should not be a 'one-size-fits-all' approach: there are particular challenges for certain students/learning objectives/contexts, there needs to be sufficient attention for digital inclusion, the digital competences of teachers and students need to stay up to speed, the positive attitude of teachers and students towards digitalisation should be enhanced, and the impact of digitalisation on assessment needs to be considered. In addition, for the organisation of HE we need to be mindful of the increasing workload for teachers, the need for professionalisation of teachers, the attention needed for privacy, security and reuse of material (copyright), the impact on the broader organisation of HE, the relation to other major issues (e.g. climate change), and the implications for diverse types of HE (e.g. continuing education and open education).

A number of essential preconditions for digitalisation in HE are formulated in the background paper. For learning and teaching, achieving added value via embedding educational technology in the teaching and learning environment is an essential precondition for successful digitalisation in higher education. It is thus crucial to embed educational technology in a teaching and learning environment in a targeted way so that it promotes student learning. For the organisation of HE, a number of preconditions are listed: modernising the infrastructure, adequate funding, professionalisation of teachers/staff, developing students' digital competences, the importance of support functions in and outside institutions, developing and conveying a vision in HEI, and embedding digital learning and teaching in quality assurance.

The next step of the project would be the needs analysis. The next steps build on the perspective of 'change management'. The central question here is: What is needed to conduct a well thought-out digitalisation policy and to continue the digital transition?

#### **Common needs analysis**

Daiga Ivsiņa from the Latvian Ministry of Education and Science presented the common needs analysis.<sup>2</sup> The aim of the common needs analysis was to create an inventory of the needs of HE to implement a policy on digital learning. In order to gather input, focus groups were conducted in Flanders and Latvia separately

<sup>&</sup>lt;sup>2</sup> Please refer to the common needs analysis for more detail. The document can be found on the POWERHEAD website <u>here</u>.





and afterwards transnationally compared. The focus groups in Flanders and Latvia were structured in a similar way, around the following general themes:

- 1. Students
- 2. Course & Curriculum Design
- 3. Vision, Policy, and Quality Assurance
- 4. Funding and Infrastructure
- 5. Other themes

These themes were based on the Laurillard model (2015)<sup>3</sup>. The model furthermore specifies two groups of elements: drivers (how teachers prioritise their activities) and enablers (facilities that teachers need to respond effectively to the 'drivers') – see Figure 1 below.

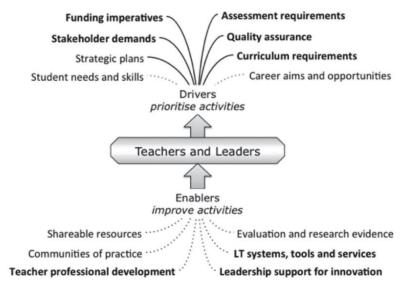


Fig. 1. the drivers of professional activity in the HE system balanced against the enablers for innovation in learning technology (bold indicates the more powerful ones).

In Flanders, initially five focus groups were conducted with: 1) students, 2) management representatives of HEIs and directors of finance, infrastructure and QA, 3) educators and educational support staff, 4) employers and social partners, 5) government, and an additional focus group was organised on the labour market perspective. In Latvia, four focus groups were organised with 1) students, 2) educators (lecturers), 3) industry/business representatives, and 4) policy makers.

The outcomes of the focus groups in both countries were discussed by the POWERHEAD Transnational Steering Group in November 2021 and as a result, a common needs analysis was published in January 2022. The topics outlined above served as the basis for the structure of the report. The main identified common needs are listed below.

#### Theme 1: Students

- 1. A wide digital literacy and high level competencies: acquisition of those competencies should be supported during studies.
- 2. Digital inclusion: accessibility of digital resources for different groups of students. Especially vulnerable groups, guidance and support is required.
- 3. Flexible and adaptive use of digital environments: personalized system tailored to diverse student's profiles, etc.).

<sup>&</sup>lt;sup>3</sup> Laurillard, D. (2015). <u>Thinking about Blended Learning. A paper for the Thinkers in Residence programme</u>. In: Van der Perre, G and Campenhout, J. V., (Eds.) Higher education for the digital era; A thinking exercise in Flanders (pp. 7-33). KVAB: Brussels, Belgium





- 4. Well-being and mental health: attention needed, especially when a lot of time is spent in digital environments and social contact decreases.
- 5. Self-regulation and self-directed learning skills: due to high cognitive load in digital environments. Especially for the first year/early stages of study support is needed.
- 6. Communication with and involvement of students: during transitions to digital education.

#### Theme 2: Course and Curriculum Design

- 1. Curriculum design:
  - Sustainable digitalisation and well-considered redesign of curricula in the long term vs.
     emergency remote learning during the pandemic;
  - Flexible and modular curricula;
  - Study modules on digital skills: which specific digital skills are important in which fields of study?;
  - Pedagogical-didactical principles as a basis for development of study programmes.
- 2. Student assessment in the digital environment(s): digital assessment poses several challenges for lecturers. Ideally, a variety of assessment methods is used.
- 3. Support and professionalisation of educators:
  - Knowledge sharing should be facilitated: ongoing mutual learning and exchanges between educators:
  - Transition to digital education requires time and energy of educators;
  - Strong need for targeted/specialised professionalisation of educators, which should be valorised:
  - Purposeful system for professionalisation of educators: developed and organised efficiently so that it covers different needs of educators.
- 1. Theme 3: Vision and PolicyVision, change management & leadership are identified as important aspects at institutional level;
  - Commitment, involvement and mutual dialogue with different parties and policy implementation at all levels;
  - Prioritise digitalisation at national level and development of policy.
  - Cooperation, exchange and common understanding in HE.
- 2. Internationalisation and digitalisation: use digitalisation to create new opportunities for internationalisation, e.g., further international profiling of HE institutions.
- 3. Role of digitalisation in quality assurance system(s): after the pandemic, quality assurance of digital education and processes should be included in the regular quality assurance system(s).

#### Theme 4: Funding and Infrastructure

#### 1. Funding

- Strong need for funding that is specifically allocated to digitalisation in HE. Significant investments are done, at the European (European Recovery and Resilience Facility RRF) and the national level, as a response to the highly digitalized education during the pandemic, however structural funding is needed as well.
- Continuous basic funding for higher education is needed to support digitalisation in a sustainable way.
- Rollout of digitalisation requires sufficient staff, who has a suitable profile; the well-being of staff needs to be monitored.

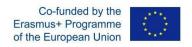
#### 2. Infrastructure

- Availability and accessibility of infrastructure;
- Provision of various digital tools and equipment;
- Sharing of educational resources;
- Digital infrastructure to support administrative processes and systems.

#### Theme 5: other themes

Involvement of industry representatives in the development of study programmes;





- Role of developers of hardware/software in digitalisation;
- Privacy, data security, and other regulatory/legal aspects;
- Psychological acceptance of change for the successful roll-out of digitalisation in higher education;
- Role of local governments.

Based on the identified common needs, Latvia and Flanders will prepare separately the guidelines on digital learning in HE and subsequently compare these guidelines transnationally. The outcomes of the current Peer Learning Activity will be taken on board to broaden the expertise.

#### 3.2 Digitalisation in higher education: experiences from European countries

#### **3.2.1** Greece

Yiannis Katsanevakis, Ministry of Education, Greece presented the Greek experience on digitalisation in HE. The Greek Ministry of Education and Religious Affairs has developed a national action plan on digitalisation in HE. This includes the targets on e-governance and digitalisation of HEIs. It encompasses different projects, such as:

- E-University: the electronic students' register;
- <u>E-Diplomas</u>: a degree register on a national scale;
- <u>E-doatap</u>: digitalisation of the Greek NARIC archives, so that it can be accessible through a special e-platform;
- Upgrading of the university coursebooks database;
- Upgrading of the electronic system for managing the selection and promotion of teaching staff.

In addition, there is a Digital Transformation Strategy 2020-2025 (also referred to as the 'Digital Bible') this is the main national strategic document in Greece which sets priorities for digitalisation and goals for developing digital skills. Its priorities include:

- curriculum design;
- update of administrative services;
- update and coordination of the traineeship services;
- improvement of subsistence and accommodation services;
- possibility of identifying and authenticating all members of the academic community through the development of Identity Management infrastructure;
- update of the HEIs Business Intelligence Hub;
- adoption of the National Open Science Policy;
- <u>e:Presence</u> service, enabling members of the Greek research and academic community to organize and conduct online teleconferences;
- the upgrading of the Electronic Voting system in universities.

In the Plan for the Digital Transformation 2021-2027, we can find measures to ensure equal access to, participation in and completion of quality, affordable, relevant, non-segregated and inclusive education and training, as well as acquisition of key competences at all levels, including higher education. It also includes graduate tracking mechanisms and services for quality and effective guidance for all learners of all ages.

Furthermore Greece has participated in the OECD-EU project "HEI innovate". The country review has focused on the internationalized institution, digital transformation and capability, entrepreneurial teaching and learning and knowledge exchange and collaboration.

The COVID-19 pandemic has dramatically accelerated digital transformation, with transitions from in-person to online classes, straining students' skills and institutions' resources. As HEIs move beyond the COVID-19 pandemic, they will need to consider how digital transformation changes their education, research, engagement and management activities. HEIs must therefore set targets and introduce strategies to recover and benefit from the digital transition. Thus, Greece took action to advance its digital transformation and capabilities. In the pandemic, distance learning in Greece showed both strong signs of





adaptability and a commitment to create the best possible digital environment for students and staff. The massive shift to digital platforms caused by the pandemic has presented new opportunities for internationalization of HEIs. Access to global experience has been greatly expanded, and the barriers to participation in international collaborations have been significantly reduced.

Demetrios Sampson, Professor of Digital Systems for Learning and Education at the University of Piraeus continued to provide a view from Greek universities. He identified five different dimensions where digitalisation in the post-pandemic teaching and learning in HE can become relevant, based on the experience of the past two years:

- 1) Curriculum: it will be important to address global problems by means of the internationalisation of the curriculum, to develop competencies related to smart citizenship (including digital sustainability and green intelligence) by means of the inter- and transdisciplinary dimension of curriculum design, to prepare youth as effective thinkers and ethical global citizens who act in a more global world through technologies developed, and co-design curricula with industry and labour market representatives.
- Pedagogy: it is needed to rethink traditional lecture-based teaching strategies and support studentcentred flipped and blended teaching and learning. Furthermore, we need to employ strategies for more engaged autonomous self-regulated (lifelong) learners.
- 3) Means technology: we need to unlock existing technologies that were originally not designed to support education and explore new technologies. That involves the provision of online access to digital educational resources in multiple forms and multiple levels of interactivity (including Educational Resources enhanced with augmented and extended reality) as well as the facilitation of educational activities such as online and discussion for community building and collaboration, experiments in remote and virtual laboratories, online visits and internships, etc.
- 4) Assessment of/for learning: we need to move beyond traditional summative paper-and-pencil exams: integrate formative e-assessment strategies and personalise feedback; summative assessment based on students' e-portfolio's and authentic learning and performance assessment exploring educational data collection and analytics; professional identity assessment for individual graduate profiling beyond a one-size degree for all.
- 5) Leadership and policies: we need to use data-driven evidence-based responsible decision-making in institution performance evaluation and benchmarking. In addition to that, it is important to apply flexible educational policies that can facilitate educational innovations (including microcredentials).

#### 3.2.2 Germany

The lessons from Germany were presented by Alexander Knoth (DAAD), Oliver Janoschka (Hochschulforum Digitalisierung - HFD) and Kornelia Freitag (Ruhr-University Bochum). They noted that Germany does not have one single national strategy for digitalisation in HE. The HE system is fragmented with competencies at federal state level. It is furthermore institution focused, with a distinction between research universities and universities of applied sciences. Key challenges can be found in the area of funding and infrastructure, as well as building communities of practice.

The speakers share a brief introduction of the activities of their respective organisations in the area of digitalisation. DAAD's funding portfolio holds scope for funding opportunities on the interface between internationalisation and digitalisation, this includes the areas of international mobility, virtual exchange and collaboration across borders. Funding is targeted at four strategic dimensions of digitalisation, namely curricula, technology, skills and competencies, and administration. Community building is key here, but proves to be difficult.

HFD orchestrates the discourse on higher education in the digital age. As an innovation driver, it informs, advises and connects stakeholders from higher education institutions, politics, business and society. Founded in 2014, HFD is a joint initiative by Stifterverband, CHE Centre for Higher Education and the German Rectors' Conference (HRK). It is financed by Germany's Federal Ministry of Education and





Research (BMBF). One initiative organised by HFD is a one-year peer-to-peer strategy consultation programme for HEIs to strategically strengthen digitalisation in teaching and learning. This programme started in 2017. In this process, both HE leadership and other stakeholders (including students) are involved, and they are supported by HFD and other external experts. Another initiative by HFD is the DigitalChangeMaker programme, that started in 2018 and engages a select group of students from across universities and disciplines to drive digital transformation of HE.

The Ruhr-University Bochum (RUB) has a digitalisation strategy since 2018, including a separate implementation plan per faculty. Digitalisation is deeply embedded at the university: RUB has experience in more than 20 years of e-learning and there is a strong support structure. The university puts a special focus on student input and participation, Furthermore, RUB hosts the Online Resources Campus (ORCA), an online repository for online educational resources for all of North Rhine-Westphalia.

At German level, a number of developments related to digitalisation in HE have taken place over the past years:

- 2019: Commission of Experts for Research and Innovation (EFI) recommends: "digitalisation rate"
   pr. student for every HEI
- Since 2021: Foundation for Innovation in Higher Education: Joint long-term funding of federal and state governments for innovation in HE in different funding streams
  - 2021: First funding stream "Strengthening university teaching through digitalisation" with volume of €330 million for 139 selected projects
- Dec 2021: New government: coalition agreement states e.g. that a new programme for digitalisation in higher education will be established
- Funding 2021 to 2025: BMBF provides €630 million for the "National Education Platform" (interoperable national ecosystem for teaching and learning on all levels)

These initiatives proved necessary, as in 2019, only 14% of German HEIs had a digitalisation strategy. The COVID-19 pandemic also moved the development of digitalisation strategies in HEIs in Germany up to speed, as is shown by a survey from HFD (2021), which finds that about 90% of HEIs declare that the planning and implementation of a digitalisation strategy has accelerated and that the topic is now higher on the agenda.

Regarding the tendencies currently at play in Germany in the field of digitalisation, it was noted that digital assessment has emerged as a hot topic. HFD has published a whitepaper 'Digital assessment in higher education' (English version expected in May 2022), providing recommendations and an overview and orientation for HE staff.

#### 3.2.3 Ukraine

**Kateryna Suprun of the Ukrainian Ministry of Education** presented the state of play of digitalisation in HE in Ukraine. The framework conditions for digital transformation are to be set in the Strategy for Digital Transformation of Education and Science. This document is to be adopted by the Ukrainian government within the coming months. It will set the priorities and goals for the next five years, from school education to university level.

A few current initiatives on digital transformation that already exist or soon will start up are highlighted. The first one is the interagency platform for the enrolment of foreign students in HEIs in Ukraine. This platform aims to improve the engagement of foreign students, make processes as user-friendly, transparent and convenient as can be. Within this project, the Ministry of Education works with e.g. the Ministry of Digital Transformation and the Ministry of Foreign Affairs, to create an ecosystem for foreign students to have a one-stop shop for education in Ukraine. Here, students could find course catalogues, submit their application, find information on visas and on the recognition of foreign diploma's and certificates. This platform is intended to be rolled out mid-2022.





The second initiative concerns electronic databases. In Ukraine, there is a unified database on education, which serves as a HE management information system. This system will be modernised in the coming years.

- For example, a graduate tracking system was set up to get a view on the graduate trajectories in higher education in Ukraine.
- Also a national student survey will be launched.
- A model of key performance indicators for HEI management is going to be set up too; this way
  progress can be measured and tracked. Information on all KPI's available will be made public
  for all stakeholders in higher education.
- The digital diploma supplement is furthermore being developed (cfr. Rome Communiqué); for privacy concerns digital technology such as blockchain may be used for this.

Third, infrastructure was one of the key concerns for HEIs at the start of the COVID-19 pandemic. With support from the World Bank, Ukraine will increase infrastructural capacities of universities and provide them with all resources for qualitative digital teaching and learning.

A fourth component that will be addressed in the strategy is the course content and curriculum. In close collaboration with the Ministry of Digital Transformation, a large scale IT reform at all levels of education was launched last years. Some aspects particularly target HE:

- The need for non-formal and informal education, including the recognition of non-formal and informal credentials/learning at the national level. QA mechanisms are built in in the system; and
- Public-private-partnerships, for the co-design of courses and curricula together with the market and industry stakeholders in dual education and in internships.

Lastly, digital literacy is an important prerequisite. Ukraine is working on integrating a digital competence framework for educators in their strategic documents. This is one of the cornerstones of the strategy that will be published in a few months.

#### 3.2.4 Ireland

Sharon Flynn from the Irish Universities Association (IUA) presented the case of Ireland. She explained that a new national digital strategy 'Connecting Ireland, The Digital Ireland Framework' is currently under development and will have a pillar on skills. There is a focus on a number of particular streams and strategic developments: enabling policies, supporting open education, professional development of staff and student success.

She also highlighted some concrete initiatives that are currently taking place. Firstly, she mentioned the Digi-HE survey, led by the European Universities Association. This survey showed that the top three enablers of digitally enhanced learning and teaching in Ireland were: 1) the proactive participation of staff and students; 2) professional development & training of teachers; and 3) national initiatives and/or targeted funding support. This shows a people-oriented approach, rather than a focus on infrastructure and technology. On the other hand, the main barriers are: 1) lack of staff resources; 2) lack of digital infrastructure; 3) lack of support of professional development; and 4) difficulty to devise a concerted approach for the entire institution. In order to improve digitally enhanced learning and teaching, peer exchange within the institution proved to be the most useful. This reflects the importance to set up communities of practice.

Another project that Sharon Flynn has been coordinating is the 'Enhancing Digital Teaching and Learning' (2019-2022) project. Its aims are to enhance the digital attributes and educational experiences of Irish university students, as well as the digital learning experiences of those students. This was to be achieved through the roll-out of a professional development programme for teaching staff. The project built on existing provisions at universities: many universities already had initiatives to support the professionalisation of staff, so the project aimed to build on these and learn from them, rather than





developing something new. In addition, the project emphasised the importance of pedagogy itself, before looking at what technologies can be used to support it. The project also had a discipline focus, as different disciplines have different needs. Furthermore, students were involved in the project as partners. The European Framework for the Digital Competence of Educators (DigCompEdu) was used to map and identify gaps in the project.

As for the project team, there were seven members (one at each university), led by coordinator Sharon Flynn. All universities were at an even level. Due to the COVID-19 pandemic, the team started to work collaboratively to support effective remote teaching and learning from September 2020 on and developed the Enhancing Digital Teaching & Learning (EDTL) approach. This was a curated set of resources for staff, giving them a set of simple elements that they can use to adapt a module that is normally taught offline to an online environment. This approach is student-centred: at the centre of the model, educators are asked to consider different aspects related to their students.

A few other activities that were also carried out in the framework of the project:

- At the time of the development of the EDTL approach, the team was also setting up the involvement of students in the project. Student interns were employed at each of the universities. They were asked to create a similar set of resources 'by students for students', targeted at students coming back to campus.
- The project also created a community and webinar series, that is open to all (both staff and students, from Ireland and international). Some of these webinars are made from a student perspective, e.g. on remote assessment, inclusivity.
- Last year, a student campaign was launched on social media to crowd source students' vision for learning in higher education in an ideal world.
- An open course for educators 'Getting started with personal and professional digital capacity' was developed.

#### 3.2.5 Hungary

**Laura Sinóros-Szabó, Hungarian Ministry for Technology and Innovation** presented the Hungarian HE system. She explained that Hungary has a digitalisation project with support from the OECD and the EU: Structural Reform Support for Higher Education,<sup>4</sup> which started in July 2020 and ended in October 2021. Its key pillars focus on reviewing the digital strategy framework, measuring digital readiness, developing indicators for this and developing practical implementation by incorporating good practices. The project heavily relied on gathering input, so many stakeholder consultation activities (webinar, interviews, fact-finding visits) took place.

The project acknowledged the broad scope of activities that are affected by digitalisation in HE. It focused on three areas:

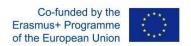
- 1. State of digitalisation
- 2. A comprehensive reform approach to policies supporting digitalisation
- 3. Measuring the digitalisation of Hungarian higher education

In the OECD-survey, digital transformation was captured by indicators related to three elements: digital readiness, digital practices, and digital performance:

Digital readiness: 90% of student respondents reported very good or sufficient access to digital
devices and high/speed internet. However, this also means that 10% of students have insufficient
access to basic digital technologies for learning. Additional challenges can be found in the field of
access to online libraries and research databases and over 30% of staff report insufficient access
to mobile devices.

<sup>&</sup>lt;sup>4</sup> See also: OECD (2021). <u>Supporting the Digital Transformation of Higher Education in Hungary</u>. Higher Education. OECD Publishing: Paris.





- Digital practices: 93% of students use digital tools weekly or more often to prepare for classes and
  to attend lectures. At the same time, 75% of teachers use digital tools at least weekly for class
  instruction and student support. Nevertheless, the majority of teachers and students prefer inperson instruction for small groups. Many students and teachers furthermore have concerns
  regarding the protection of their personal data by the HEI.
- Digital performance: about half of the student respondents agreed that online learning increased their study skills, such as autonomy and time management. Yet, half of the student respondents also reported that their teachers made effective use of digital tools to support teaching. Online teaching also leads to more stress and less satisfaction for 40% of the students and 50% the teachers. What is more, fewer than half of the teachers were confident in their ability to prepare students to be digitally competent upon graduation.

Although national policies offer a framework to provide digital higher education, some challenges remain. Related to digitalization in higher education, arrangements for part-time study remain rigid, employment conditions for higher education teachers are needed that allow and encourage them to take on professional development that provides the skills needed for delivering and assessing online learning and accreditation processes are not yet oriented to quality digital higher education.

There is also a need for a shifting of gears in the higher education strategy, where higher education institutions are engaged in the design and implementation of the strategy and the impact of the multiple actions on the practices is maximized.

Finally, the current data collection systems do not contain any data on digitalisation, and the collected data are not always used to support policy.

An additional project supported by the EU and the OECD targets quality assurance (QA). This project started at the end of 2021. It will map the Hungarian QA landscape and make an international analysis of QA of digital provision. Based on stakeholder consultations, recommendations for a revised external quality assurance framework will be set up, as well as for the development of new external and internal QA services and support mechanisms. This project will end in March 2023.

Roland Szilágyi of the University of Miskolc added a few thoughts from a HEI perspective. He explained that different systems applied for digital education, creating several platforms. There were different applications that were used for communication (Teams, Zoom, e-mail, ...), learning management (Moodle, MOOCs...), in addition to the general educational system where information such as schedules, official messages and registration for exams was published. The use of different groups and channels created complications.

In order to further develop and integrate digitalisation into HE, it is important to integrate the aforementioned systems into one, to make them more user-friendly and efficient. Furthermore, digital competence-based development of skills both for lecturers and students will be necessary. Roland Szilágyi mentions that the university is carrying out a pilot programme with two other Hungarian universities to develop the digital competences of students. It would however be necessary to consider risks of license dependence and property rights issues. Yet, further development and integration will allow benefits, such as new possibilities of data-based analysis of the performance of students.

#### 3.3 Exchange in three break-out groups

The participants of the PLA were split in three break-out groups to further discuss the topics identified by the needs analysis. Each group was moderated by one of the project team members and for each group a rapporteur from Latvia was appointed. The groups discussed different themes, to ensure all themes were covered in two break-out groups.





Break-out	Moderator / Rapporteur	Themes								
Group 1	Tine Degrande / Liene Levada	<ol> <li>Students</li> <li>Course and curriculum design</li> <li>Vision and policy</li> <li>+ 'other' theme</li> </ol>								
Group 2	Carine De Smet / Iļja Afanasjevs	<ol> <li>Course and curriculum design</li> <li>Vision and policy</li> <li>Funding and infrastructure</li> <li>+ 'other' theme</li> </ol>								
Group 3	Magalie Soenen & Daiga Ivsiņa / Linda Daniela	<ol> <li>Vision and policy</li> <li>Funding and infrastructure</li> <li>Students</li> <li>+ 'other' theme</li> </ol>								

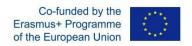
In general, the break-out groups aimed to identify which similarities and differences were found in today's country presentations and which of the needs identified in the POWERHEAD common needs analysis were recognized in the country presentations and what were the differences. The groups also discussed which themes need special attention in guidelines towards the institutional level and the policy level.

The topics that were highlighted during the discussions are listed per theme below.

#### 3.3.1 Students

- 1. Digital competencies/literacy (digital inclusion):
  - Digital competencies should be part of the curriculum (this is at the interplay with the curriculum design). Special attention is needed for the lack of digital skills of students.
  - Attention should also go to digital inclusion, flexibility and adaptivity. Part-time students should not be forgotten. Lifelong learning provision focused on digital skills should also be employed to solve the age gap.
- 2. Well-being and mental health
  - Special attention is needed to balance the workload after the pandemic. A healthy learning environment is paramount.
  - During the pandemic, not all lecturers had the time and means to guarantee the quality of the courses, as the situation put extra strain on staff and students. QA systems and procedures (on national and institutional level) can be employed as a means to prevent mental health issues.
- 3. Self-regulation skills (flexibility and adaptivity)
  - Self-regulation skills do not come naturally and have to be embedded throughout HE. Self-regulation and time planning are essential skills that require a place in the curriculum.
  - A balance should be found between ways of digitalised teaching and learning that were developed as a response to the COVID-19 pandemic and established distance learning.
- 4. Communication/involvement, student participation
  - With digitalisation comes the danger of hyper-individualisation.
  - It is important to create an environment both on and off campus, to work in groups and for students to meet with lecturers.





#### 3.3.2 Course and curriculum design

- 1. Sustainable digitalisation
  - Digitalisation is not the universal solution to all our problems. Not all courses can be digitalised.
  - Students should be partners in curriculum design, incentives should be created to support bottom-up initiatives (Ireland's example).
  - There should be instructional design support (bottom-up initiatives).
  - Pedagogically sound and ethical guidelines should come from the national level.

#### 2. Leadership and teamwork

- Universities should create more leadership in course design.
- It would be beneficial if educators work in teams to create curricula. Not every single educator needs to know how to do instructional design. Instructional designers have an important role to play here.
- Teamwork also opens the floor for student involvement in course and curriculum design.
   Students are to share the responsibilities for course design with lecturers.

#### 3. Flexible and modular curricula

- The modular curriculum should be digitalized for part-time students to provide more flexibility.
- The primary responsibility for micro-credentials should come from institutions. A control mechanism for qualifications should be made clear.

#### 4. Assessment in digital environments

- It is self-evident that assessment should be in line with the learning objectives. Guidelines are needed at national level to support universities to link learning objectives with assessment methods.
- There need to be different forms of assessments, they cannot be all digital.
- Assessment in a digital environment creates risks for academic integrity. Building trust is important, as well as formative assessments in the beginning, followed by assessment during and after learning.

#### 3.3.3 Vision and Policy

- 1. Prioritise digitalisation at national level and develop policy
  - The importance of institutional autonomy was highlighted. It would be best if each HEI develops its own strategy for digitalisation, although some institutions are looking for more guidance at national level. National strategy on digitalisation could thus facilitate institutional strategies.
  - The EU offers many tools and programmes at policy level, including the RFF that can be used to boost digitalisation in HE. Strategic objectives set at European level can support countries, which then have the responsibility to work out their national preferences.
  - The link between policy and funding and infrastructure was highlighted. Here, the governance issue is crucial.
  - It is also important to consider and explain the 'why' of digitalisation. It is necessary to define what we want HE to look like in the future and then use digitalisation to get there. Digitalisation in HE can support areas such as internationalisation and sustainability.
  - A big challenge that changes happen at a fast pace and policy has to be frequently adapted. It is necessary to be more responsive. A co-creation process would be useful.

#### 2. Internationalisation and digitalisation

- Digitalisation in internationalisation has great potential: students could get international
  experience via virtual/blended mobility. However, it should remain clear that
  virtual/blended mobility is not the same as physical mobility; these are two different types
  of mobility and may have other goals.
- This is particularly relevant in the context of European University Alliances.





#### 3. Collaboration

- At the institutional cooperation level, different systems need to be linked, to be able to provide different services in the future. Some European University Alliances are experimenting in this domain.
- Collaboration (communities of practice) should be set up at different levels: leadership (vice-rectors), support services (T&L, IT), subject related staff communities, etc. They can be set up at both national and international (e.g. European Universities Initiative) level.

#### 4. Indicators for quality assurance

- Participants were rather reserved on the topic of indicators. The big question is how and
  what to measure. It should also be considered what should be looked for exactly, who is
  going to develop the indicators and whether the indicators would be reviewed by
  stakeholders.
- Indicators would address a much broader aspect than only the performance of a programme, they would relate to the higher education funding model, etc.
- Hungary provides the example of indicators based on surveys delivered by students and teachers.
- An additional advantage of digital learning is that the design/development in course teams and via peer review are built-in before the implementation of the course (so during the development phase). This is not always possible for traditional lectures.

#### 3.3.4 Funding and infrastructure

- 1. Funding and investment in digitalisation
  - Digitalisation is a pre-condition for modern education. Yet, digitalisation in HE is underfinanced in most European countries. Targeted investments are necessary.
  - There are large disparities between European countries. Innovation should be organised across all of Europe.
  - The wider debate about funds for HE was taken into account. The topic of flexible learning pathways (including in a digital environment) and lifelong-learning has a place in this debate. Questions that need answering are what HE will look like in the future (link with vision and policy) and how the funds are distributed and managed.

#### 2. Collaboration between HEIs

- Institutional collaboration within the country often turns into competition, leading to the challenge that they do not share resources.
- Collaboration can however also be found internationally. Existing networks and structures like the European University Alliances and other experimental formats should be used to combine forces.

#### 3. Infrastructure

- With regards to infrastructure and sharing of IT and data, the question of licences and payments arose. It should be made clear who pays for what.
- Participants mentioned also the importance of data security. The organisation of a PLA in this area would be useful.

#### 3.3.5 Other themes

- 1. Qualifications and certificates
  - The control over digital qualifications and certificates is complicated. Fake diplomas and online misinformation cause confusion, especially in an international context. ID verification or another control mechanism (e.g. blockchain) should be employed.
  - This is also pertinent in the case of micro-credentials.

#### 2. Stakeholder involvement

- The vision of students is highly valuable, they are a significant partner.
- The question arose how to involve industry: how can companies be mobilised to invest in HE, as the labour market insists on certain outputs from education.





• In the case of the involvement of big tech in digitalisation in HE, it may be difficult for a single country to make agreements. This could be done in a more centralized way at European level.

# 3.4 Digitalisation in higher education from an international perspective: presentation DEAP

Chrystalla Petridou, on behalf of the European Commission, presented the Digital Education Action Plan (DEAP), a plan that runs over the period 2021-2027. This plan builds on the previous Digital Education Plan for the period 2018-2020. It is set up in a political context where European Commission President Ursula von der Leyen had committed to getting Europe's digital skills up to speed, both for young people and adults, to address the digital skills gap in the workforce.

She noted that in the COVID-19 crisis, it became clear that HE had a higher level of preparedness compared to schools and VET providers. In spite of the acceleration of digitalisation, there are however still different levels of digital capacity in HE across Europe: some HEIs face challenges with their capacity to offer digital tools. There is also a slow system-wide take-up of effective digital education practices. In order to advance digitalisation, the commitment and vision of the leadership is important.

A number of drivers that foster digitalisation in higher education are highlighted: internationalisation, student and staff exchange, distance/online/blended learning, flexible/modular learning, MOOCs and Open Education Resources and digital credentials.

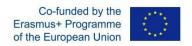
Lifelong learning (LLL) needs are growing in HE, notably the need for short-term, flexible learning opportunities leading to re-skilling or upskilling. There is furthermore a clear trend towards integrating blended learning in HE. It is also apparent that students prefer blended learning over fully online learning. The organisation of blended learning is however not evident; it requires good planning and support from national authorities.

A high level of quality of digital content is a must. It should be delivered in an interactive, inclusive, multilingual and accessible way. The development of quality digital content requires expertise in instructional design and it should be assured that assessments are suited for the online mode. Stakeholders have expressed that there is a need for support at European level: to boost expertise and provide the conditions to create quality digital content, as well as interoperability: to provide synergies between online platforms. Furthermore, when it comes to online learning platforms, it is noted that universities are getting dependent on companies and that the leading MOOC platforms are based outside the EU. The offer within the EU is moreover unevenly distributed, so there is a scope for scale-up in this domain.

The DEAP will be a key enabler for the European Education Area and the new Skills Agenda. It provides an integrated approach for technology use in education and improving digital skills, with a strong focus on quality and inclusion. Its scope goes beyond formal education, as it also targets lifelong learning. To achieve its goals, two strategic priorities with corresponding actions are formulated:

- 1. Fostering the development of a high-performing digital education ecosystem
  - 1. Action 1: Strategic Dialogue with Member States on the enabling factors for successful digital education
  - 2. Action 2: Council Recommendation on blended learning approaches for high-quality and inclusive primary and secondary education
  - 3. Action 3: European Digital Education Content Framework
  - 4. Action 4: Connectivity and digital equipment for education
  - 5. Action 5: Digital transformation plans for education and training institutions
  - 6. Action 6: Artificial intelligence and data usage in education and training





- 2. Enhancing digital skills and competences for the digital transformation
  - 1. Action 7: Common guidelines for teachers and educators to foster digital literacy and tackle disinformation through education and training
  - 2. Action 8: Update the European Digital Competence Framework to include Al and datarelated skills
  - 3. Action 9: European Digital Skills Certificate (EDSC)
  - 4. Action 10: Council recommendation on improving the provision of digital skills in education and training
  - 5. Action 11: Cross-national collection of data on student digital skills and introduce an EU target for student digital competence
  - 6. Action 12: Digital Opportunity Traineeships
  - 7. Action 13: Women's participation in STEM
  - 8. Digital Education Hub

Zooming in on the Digital Education Hub, this action is aimed at developing a digital education community. The hub will be gradually built up, starting from 2022. Its focus areas include interoperability, digital education content and digital assessment. The hub will collect and disseminate knowledge and best practices (collected annually), via the online page of the hub under the European Education Area Portal. It will also provide a space for co-creation and acceleration of solutions for education and training, not only via dissemination, but also through workshops and webinars.

A few digital opportunities within Erasmus+ were also highlighted, including the Digital Opportunity Traineeships (DOT) for students and recent graduates, as well as for HE staff, aimed at boosting digital skills necessary for the future. There are also possibilities for HEIs and other organisations to work in partnerships under KA2 projects.

In terms of EU-support, there are also opportunities in the RRF. The RRF is advancing reforms and investments that will boost modernisation of education systems, improve their resilience and accelerate their digital and green transitions. Based on the RRPs already adopted investments and reforms related to education account for approximately 10% of the total package. Approximately 30% of the total spending on education is devoted to digital education, a key focus of nearly all national plans.

# 3.5 Presentation of a current good practice: the Acceleration Plan in the Netherlands

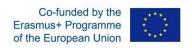
Johanna de Groot from SURF (the IT cooperation organisation of higher education and research institutions in the Netherlands) presented the Dutch Acceleration Plan for educational innovation with IT. This plan is a collaboration between the Netherlands Association of Universities of Applied Sciences, the Universities of the Netherlands and SURF. It started in 2019 as a four-year programme and received a budget of €17,5 million by the ministry of education, as well as in kind financing by institutions (estimated at €65 million).

Considering that there is a huge potential for the use of digital tools, it was deemed important to invest heavily in the use of technology in order to accelerate educational innovation in higher education in the Netherlands. The overall goals of the Acceleration Plan are to improve the job market connection, to make education more flexible and to learn smarter and better with technology.

Different aspects are addressed within the programme team. There are three working groups:

- 1) Practical skills education,
- 2) Remote assessment,
- 3) EdTech.





There are also several thematic zones that are addressed by the project team:

- Strengthening digital human capital
- Secure and reliable use of education data
- Accelerating together
- Professional development
- Evidence-informed educational innovations with IT
- Making education more flexible
- Towards digital (open) educational resources

As for the governance of the programme, there is a steering group that consists of members from the collaborating partners, as well as from student unions. The ministry of education is also present and is reported to. Furthermore, there are teams of 4-19 experts from HEIs and each team has a team-lead, as well as a 'connector' that is responsible for connecting to national developments and to the other teams in the programme.

As a response to the COVID-19 pandemic, the Acceleration Plan has somewhat adapted its structure, as two new ad-hoc working groups were set up in the summer of 2020: one on remote assessment and one on practical skills education. A digital communities platform was furthermore set up in 2020, to enhance knowledge exchange, with a focus on practical knowledge and experience regarding educational innovation. This platform brings together staff and students form HEIs who can post on the platform or follow webinars on urgent topics.

Johanna de Groot shares some reflections from the experiences in the Acceleration Plan. She mentions that success factors that contributed to the project were firstly the bottom-up approach that was taken (not only top-down), secondly that the teams were able to collaborate on concrete products and that funding was available to speed up and deliver, and thirdly the commitment at top-level (in combination with the bottom-up initiatives). There were however some challenges too, namely the adoption of developed innovations in HEIs, the enthusiasm and energy levels in the team and the focus on sufficient concrete products, outputs and results. She highlighted the importance to pick a team lead and a core team wisely, so as to activate the process, and to not underestimate the time needed to advance.

As for next steps after the current Acceleration Plan (this is the last year of the programme), Johanna de Groot expressed that there is much enthusiasm for the programme, both at ministry level and from the board members. She is therefore confident that the work will be continued on some way or another. A project proposal 'Acceleration Plan on steroids' – which includes many of the topics of the Acceleration Plan– has been submitted: this proposal addresses HE and VET but also goes beyond education. If this proposal is not accepted, it is expected that the work will be continued at a smaller scale, with a central role for SURF.

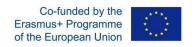
The Acceleration Plan will host the Educational Pioneers and Innovators Conference (EPIC) on 30 May to 1 June 2022, an international conference aimed at sharing and accelerating innovative practices in higher education worldwide. This event is open to all who are interested.

#### 3.6 The student perspective

**Ruben Janssens from European Students' Union** noted the opportunities of digital learning, as it can make education more student-centred, accessible, international, flexible and well-rounded. The diversity of learning and delivery methods can help to better fit learners' needs and provide necessary flexibility for an increasingly diverse learner group. However, he underlined that digitalisation is a tool, not a goal in itself.

Ideally, digital learning should be student-centred and interactive. This can be achieved by creating institutional plans, that should focus on what impact digitalisation has on learning and how it can improve quality and accessibility. Students should be involved in every step of the process: from the conceptualisation of digital learning activities to evaluation stage. Constant feedback will be necessary, therefore students' involvement need a conscious integration in QA systems. In order to create an ideal





digital learning setting, certain resources will be necessary, both in terms of infrastructure – this should be reliable, accessible, secure and up-to-date – but also staff and students need certain resources, namely pedagogical skills, digital literacy, time and recognition for developing learning methods and support resources (including for mental health).

Adequate funding remains pertinent: digitalisation cannot be an excuse for reducing investment. Furthermore, the digital platforms that are used for education should be shaped along the needs of the teachers and students, rather than the other way around. EdTech companies need to adapt their offer to the pedagogical visions and user experiences. HEIs and countries can work together to enforce the negotiation position towards large EdTech companies. It was noted by one of the participants that students are often the drivers of innovation (start-ups) and whether they have a role to play. Ruben Janssens answered that start-ups in EdTech can be very interesting, but HEIs are generally not very drawn to very young start-ups, because of uncertainties and security concerns.

Ruben Janssens addresses an issue that raises particular concern among students: online proctoring. Due to the COVID-19 pandemic, the use of online proctoring tools have become widespread. This however is very invasive to students' privacy and contribute to stress and discrimination. It would be preferred to promote mutual trust and academic integrity. In this respect, it is necessary to develop ethical guidelines for the use of online proctoring, and to limit the use of online proctoring and develop tools with ethical and privacy considerations in mind. During the discussion, it was noted by another participant that the student pool is diverse and that there is a segment of students with different needs, and for whom online proctoring is useful. HEIs need to balance the different needs and take choices that keep education efficient. Although it is a positive development that there is catering to students with different needs, Ruben Janssens however argues that students should not be forced into an online proctoring environment. They should furthermore be informed on the value of privacy and their own data.

Another aspect of digitalisation that is highlighted is the use of data and artificial intelligence (AI). Learning analytics can provide important insights to improve learning, for example for optimising and personalising the learning environment and study track counselling. This can help to improve the quality and accessibility of education and allow a student-centred approach. However, data security and privacy should be kept in mind and the use of learning analytics should not lead to over-assessment or a loss of personal context and contact. For this, it is required that students are the owners of their own data, that they give active consent to use this data, that it is anonymised and aggregated and that there is clear access control. From a pedagogical point of view, learning analytics should not be used for denying access or assessment; it should instead be used for personalised guidance and to improve activities. Students and teachers should be involved in the process, so as not to diminish the personal perspective. Mostly, Ruben Janssens highlighted that students cannot be reduced to numbers.

#### 3.7 Preparing the road ahead

The participants of the PLA engaged in a roundtable discussion that was chaired by **Isabelle De Ridder**, where final comments were shared from the perspective of higher education institutions and from the ministries and national authorities on what needs to be done next in order to advance digitalisation in HE. The other stakeholders present had the opportunity to react.

#### 3.7.1 Reflections from HEIs

A first round focused on HEIs and addressed the following questions:

- Given today's context and identified needs during the pandemic:
  - o How can institutions further shape their digitalisation policy?
  - What do institutions need from the government and other involved parties at national level to develop a digitalisation policy?





In line with what was discussed before, funding was mentioned as a key enabler to support digitalisation in HE. This is however more complex than just giving money: it is necessary to think about who is getting money for what and which funding should be provided at faculty, regional or national level.

Besides enablers such as funding, HEIs also need drivers at the national and institutional level (given the autonomy of HEI).

Furthermore, training of both teachers and students is important. There needs to be more professional development and training for professors and all others engaged in teaching and learning.

HEIs also need instructions or rules to navigate between digital learning and distance learning technologies. This will help them decide which environment is suitable for each situation.

Collaboration can be beneficial too and should be embedded systematically. A community (peer learning) should be created to exchange experiences. The exact formats for collaboration would depend on the users; smart designs of collaboration formats should be considered. Collaboration at international level can be interesting too and may for example include an international repository of resources.

In any case, it will be necessary to work simultaneously at different fronts: both within HEIs and at national and even European and global level. This requires good planning and leadership.

#### 3.7.2 Reflections from ministries and national authorities

During the second round, the representatives from ministries and national authorities present were asked what more needs to be done at policy level.

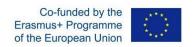
It was agreed that funding is essential to move things forward. Hence, ministries work closely with HEIs to provide adequate funding. There was a discussion on the role of indicators and benchmarking in this respect: public authorities need to be able to measure certain indicators on digital teaching and learning, in order get a better picture. This is necessary for decision making, as evidence-based policy making is crucial and it should be ensured that the limited resources are supporting the right initiatives (accountability/reporting duties of HEI). Nevertheless, it was noted that when something gets measured, it also steers the activities, but not always in the right direction. This is especially relevant in innovative areas such as digitalisation in HE. The use of indicators should be well thought through and it was advised not to rely too much on very specific indicators.

One of the main challenges is to decide what is the place of digitalisation in HE and what role HE has in the wider digitalisation trend. The creation of a vision at national level is important, but in order to work, this vision needs support and input from both the ministries and national authorities, and the actors in the field (networking and collaboration). Intermediary services provide a useful role in this regard; it is more efficient to work together and listen to each other, rather than having a top-down structure. The 'sandbox idea' also comes in play here: we cannot wait for results or a big strategy, but we should flexibly adapt as we learn through trial-and-error. It may be necessary to find a middle way, with different approaches for different HEIs. Those who are forward-looking and proactive should get support, but those who are not should not be left behind either. Mostly, digitalisation should be seen as a tool and not an end in itself. It was highlighted that digital learning should stay a choice and should not be compulsory. National authorities need to provide resources and conditions to enable this, in collaboration with stakeholders.

#### 3.8 Concluding remarks and next steps

**Project coordinator Magalie Soenen** briefly summed up the discussion in the PLA. She took note that digitalisation should be used as a tool to increase quality and inclusion. The interaction between students and teachers remains very important, also in a digital context. At policy level, it is necessary to create digitalisation strategies in co-creation between stakeholders. We are confronted with a rapidly changing environment, so the policy and structures furthermore need to be flexible.



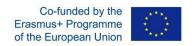


She also discussed the next steps of the POWERHEAD project. After the PLA, the project will focus on developing guidelines on digital learning in HE. These will first be prepared at national level through national working groups in Latvia and Flanders. During this stage, the information gathered so far (including from the PLA) will be processed. Both working groups will provide a summary of their conclusions. Subsequently, this will be discussed in the Transnational Steering Group before the summer. They will have an in-depth discussion of the conclusions and agree on the guidelines for national policy and HEIs on digital learning. The publication of the guidelines is foreseen by autumn 2022.

The project will be rounded off with a dissemination conference that is to take place in October-November 2022, as well as other dissemination activities. This way, the project deliverables – notably the guidelines – are disseminated across EHEA-countries, thus allowing other countries to also make use of the guidelines.

The project coordinator warmly thanked all participants for their active participation in the PLA. Their input will provide an important basis for the next steps in the project.





#### **Annex I - Presentations**

- POWERHEAD PLA introductory presentation
- Presentation of the background paper by Tine Degrande (Flemish Education Council)
- Presentation of Greece by Yiannis Katsanevakis (Ministry of Education, Greece) and Demetrios Sampson (University of Piraeus)
- Presentation of Germany by Alexander Knoth (DAAD), Oliver Janoschka (Hochschulforum Digitalisierung) and Kornelia Freitag (Ruhr-University Bochum)
- Presentation of Hungary by Laura Sinóros-Szabó (Ministry for Technology and Innovation) and Roland Szilágyi (University of Miskolc)
- Presentation of Ireland by Sharon Flynn (Irish Universities Association)
- Presentation on digitalisation in higher education from an international perspective: presentation DEAP by Chrystalla Petridou (European Commission)
- Presentation of a current good practice: the acceleration plan in the Netherlands by Johanna de Groot (project leader acceleration plan Netherlands)
- Presentation on the student perspective by Ruben Janssens (European Students' Union)
- Presentation on the next steps of the POWERHEAD project



# POWERHEAD

**Empowering Higher Education in Adopting Digital Learning** 







- Title: Empowering Higher Education in Adopting Digital Learning
- Time schedule:
  - o Call 2019, approval summer 2020
  - Implementation: December 2020 November 2022
- Budget:
  - Total budget: 180.638,47 Euro
  - Max. EU grant: 162.574,62 Euro
  - 10% co-financing







### Partners:

- Department of Education and Training, Belgium/Flemish
   Community
  - Linked third party Flemish Education Council (VLOR)
- Department of Higher Education, Innovation and Science, Latvia

### Experts:

Linda Daniela, Piet Henderikx, Demetrios Sampson,
 Pieter Soete, Cis Van Den Bogaert, Janina van Hees





# 2. In general

- Objective of the project: design guidelines for a policy on digital learning in HE at two levels:
  - national policy
  - higher education institutions
- Target group:
  - national authorities of the EHEA-countries
  - stakeholders of higher education: HEI, students, academic staff, employers
- Planned activities:
  - Analysis of needs of actors in HE
  - Comparison/confrontation with other countries
  - Publication of guidelines





# 2. In general

- Links to current policy:
  - Recovery plan European Commission
  - Digital Education Action Plan European Commission
  - European Education Area
  - Rome Communiqué: 'innovative and interconnected' +
     Annex Learning and Teaching: 'foster continuous enhancement of teaching, especially digital'
  - O ...







### 2 croscutting work packages:

- WP1: General management and coordination of the project
- WP2: Monitoring and evaluation

### 5 content work packages:

WP3	WP4	WP5	WP6	WP7
Setting the stage	Needs analysis	Broadening the expertise	Guidelines on digital learning in HE	Dissemination of results





# 3. Methodology

# WP5: Broadening the expertise

Timing	January-February 2022
Objective	Sharing of the different needs analysis and confrontation with experts of different EHEA-countries.
Rationale	It is interesting to see if the results of the project so far, are recognisable for other Bologna countries (who may be at different stages of the implementation of digital learning in higher education).
Activity	A two-day PLA-seminar
Methodology	Peer Learning Activity involving representatives from national working groups of the participating countries and international peers from three other EHEA-countries, experts and representatives of the ministries.
Deliverable	Report of the PLA

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

# 4. Roadmap

Work Plan – Road Map Project	M 1	M 2	M 3	M 4	M 5	M 6	M 7	M 8	M 9	M 10	M 11	M 12	M 13	M 14	M 15	M 16	M 17	M 18	M 19	M 20	M 21	M 22	M 23	M 24
	Dec 20	Jan 21	Feb 21	Ma 21	Apr 21	May 21	Jun 21	Jul 21	Aug 21	Sept 21	Oct 21	Nov 21	Dec 21	Jan 22	Feb 22	Ma 22	Apr 22	May 22	Jun 22	Jul 22	Aug 22	Sept 22	QKt 22	Nov 22
Work package 1: General management an	d coo	rdina	tion a	f the	proje	ct (=	cross	cuttin	g wo	rk pad	kage	)												
1.1 Preparatory activities																								
1.2 Management activities																								
Work package 2: Monitoring and evaluation	on (=	cros	scuttii	ng wo	rk pa	ckage	)																	
2.1 Evaluation	260				-																			
2.2 Reporting									ijij		ij i											j į		
2.2 Maintaining website																								Į.
Work package 3: Setting the stage																								
3.1 Preparation of a background paper in working group meetings (Flanders)																		800 - 5						
3.2 Background paper		0 0							0 0		0 0		n 20		. 3					S		05 - 10		
3.3 Kickoff of the transnational steering group in Flanders																								
3.4 Report of the transnational steering group		S 8		3 38					\$ - a		Ø - Ø		S 8		2 %			82 - 3		82 9		0 a		0
3.5 Final background paper		2 2		7 88			88 - 7		8 8		8 8		3 8		X 88		7	88 - 7	-	88 - 6		8 8		3
Work package 4: Needs analysis				A 10			-				<i>2</i>									e 1		S		i de
4.1 National working group in Flanders																								
4.2 National working group in Latvia							Ĭ											Ď		Î		Ĭ		-
4.3 National inventories of needs and reports													S 8											
4.4 Transnational steering group: comparison needs analysis in Flanders																								
4.5 Overview of the common needs (transnational)		8 8				3:			8 - 8		8 8									8		3 3		3
Work package 5: Broadening the expertise	e																							
5.1 Peer learning activity in Latvia		41 43							60 0		G 5						C .	1		12				411
5.2 Report of the peer learning activity		9																						<i>3</i>





# Background paper

**POWERHEAD** 







5 content-related Work Packages:

WP3	WP4	WP5	WP6	WP7
Setting the stage	Needs analysis	Broadening the expertise	Guidelines on digital learning	Dissemination of results

- Background paper
  - Prepared by Flemish Working Group in February/March 2021
    - Co-chaired by Cis Van Den Bogaert & Isabelle De Ridder
    - 16 members, different stakeholders
  - Presented and enriched during transnational steering group meeting on 31 March 2021
- General objectives of the background paper
  - Give an overview of insights on digitalisation in HE
  - Outline the current context of digitalisation in HE



#### 1. Context



- Original objective of the project (call in 2019)
  - Design guidelines for a policy on digital learning in HE at two levels:
    - national policy
    - higher education institutions
  - Why? Digital learning in an ad-hoc, haphazard way.
- Impact of the COVID-19 context
  - Rapid implementation of digital education on large scale
  - But... even today: still many questions.
  - Given this context...
    - ...what do institutions need from the government to develop a digitalisation policy?
    - ...how can institutions further shape their digitalisation policy?





## 2. Recent policy documents on digitalisation in HE

- In the European context
  - European Digital Strategy & Skills Agenda
  - Communication on European Education Area & Digital Education Action Plan
  - Bologna Process & European Higher Education Area
  - Digital Competence Frameworks
  - EUA/Erasmus+ project: Digitally enhanced learning and teaching in European higher education institutions
  - European Projects in which Flanders and/or Latvia are actively involved: MICROBOL & OpenU





## 2. Recent policy documents on digitalisation in HE

- In the Flemish context
  - "Digisprong" ("digi-leap") for compulsory education
  - "Voorsprongfonds" ("lead fund") for higher education
  - Previous initiatives of the Flemish Education Council (incl. recommendation on digital learning)
- In the Latvian context
  - National Development Plan of Latvia for 2021-2027
  - Education Development Guidelines & OECD Skills
     Strategy Implementation Guidance in Latvia
  - OECD publication Going Digital Latvia
  - Latvian recovery and resilience plan





## 2. Recent policy documents on digitalisation in HE

#### Reflections

- No consensus on digital learning and teaching
- Despite large number and variety of documents, many challenges and opportunities recur.
- Some documents date back to some years ago, but many challenges still remain.
- Specific goals of background paper
  - Definition of digital learning and teaching
  - Opportunities, challenges & essential preconditions
  - Reflection on 'Next steps'







#### Definition

- Digitally enhanced learning and teaching is 'any type of learning or teaching that is accompanied or supported by technology' (Goebel et al., 2021).
- Different degrees: Continuum of digitalisation possibilities
- Blended, distance, and hybrid learning
- Recent technological developments
  - Technology vs. educational technology: *technology that is used in teaching and learning contexts* (Vlor, 2014)
  - Typologies of educational technology



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

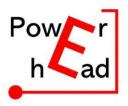
#### 4. Opportunities of digitalisation in HE

#### For learning and teaching

- Designing quality education
- Promoting student learning
- Motivate and connect with the world of students
- Contribute to inclusion
- Collaboration and exchange between teaching staff and students

#### For the organisation of HE

- Preparing students for digital society
- Reaching more and more diverse students
- Contributing to innovation in HE
- Strengthening participation of teachers and students
- Administrative support via digital platforms



#### 4. Challenges of digitalisation in HE (1)



#### For learning and teaching

- Education-driven instead of technology-driven
- Importance of teaching method besides educational technology
- No 'one-size-fits-all' approach: particular challenges for certain students/learning objectives/contexts
- Attention for digital inclusion
- Digital competences of teachers and students
- Positive attitude of teachers and students towards digitalisation
- Impact on assessment





#### 4. Challenges of digitalisation in HE (2)

#### For the organisation of HE

- Increasing workload for teachers
- Need for professionalisation of teachers
- Attention needed for privacy, security and reuse of material
- Impact on the broader organisation of HE
- Relation to other major issues, such as climate challenge
- For diverse types of HE: continuing education and open education



#### 4. Essential preconditions for digitalisation in HE

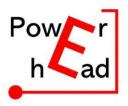


#### For learning and teaching

- Added value via embedding in the learning environment
- Connection to learning objectives, students and context

#### For the organisation of HE

- Modernising the infrastructure
- Adequate funding
- Professionalisation of teachers/staff
- Developing students' digital competences
- Importance of support functions in and outside institutions
- Developing and conveying a vision in HEI
- Embedding in quality assurance







Conduct a needs analysis

WP3	WP4	WP5	WP6	WP7
Setting the stage	Needs analysis	Broadening the expertise	Guidelines on digital learning	Dissemination of results

From the perspective of 'change management':
 What is needed to conduct a well thought-out
 digitalisation policy and to continue the digital
 transition?





### Thank you!

**Questions? Comments?** 





## POWERHEAD Common Needs Analysis in Flanders and Latvia

22 February 2022





#### Introductory Part I: Methodology

Aim: an inventory of the needs of HE to implement a policy on digital learning

Focus groups (FG) were conducted in Flanders and Latvia separately and afterwards transnationally compared

Model for the needs analysis was developed by the Flemish party:

Model of Laurillard (2015)

Drivers: how teachers prioritise their activities Enablers: facilities that teachers need to respond effectively to the 'drivers'.



Fig. 1. the drivers of professional activity in the HE system balanced against the enablers for innovation in learning technology (bold indicates the more powerful ones).





#### Introductory Part II: Themes & Process

Major 5 themes: (1) Students (2) Course & Curriculum Design (3) Vision, Policy, and QA (4) Funding and Infrastructure (5) Stakeholders

#### In Flanders five FG were conducted with:

Students

Responsibles of HEI and directors of

finance, infrastructure and QA

Educators and educational support staff

**Employers and social partners** 

Government

1 additional focus group: labour market

perspective

**Total number** of participants in FG 41

#### In Latvia four FG were conducted with:

Students
Educators (Lecturers)
Industry/ business representatives
Policy makers

**Total number** of participants in FG: 21





#### Results of Focus Groups in Flanders and Latvia

#### Which common needs were identified?

A Flemish Needs Analysis and a Latvian Needs Analysis was discussed during the meeting of the transnational steering group of the project on November 16 and 17 2021

Project document "Common needs analysis"

prepared by Flanders Published on January 2022





#### Theme (1) STUDENTS

- 1. A wide digital literacy and high level competencies:

  Acquisition of those competencies should be supported during studies
- **2. Digital inclusion:** accessibility of digital resources, different groups of students, esp. vulnerable groups, guidance and support is required.
- **3. Flexible and adaptive use** of digital environments (personalized system, diverse student's profiles, etc.)
- 4. Well-being and mental health
- 5. **Self-regulation and self directed learning skills**, esp. for the first year/early stages of study, support is needed.
- 6. **Communication** with /and involvement of students





#### Theme (2) Course and Curriculum Design

#### 2.1. Curriculum design:

- Sustainable digitalisation and well-considered redesign of curricula in the long term vs emergency remote learning during the pandemic;
- Flexible and modular curricula;
- Study modules on digital skills: which specific digital skills are important in which fields of study
- Pedagogical-didactical principles as a basis for development of study programmes

#### 2.2. Student assessment in the digital environment(s)

Digital assessment pose several challenges for lecturers. Ideally, a variety of assessment methods is used.





#### Theme (2) Course and Curriculum Design

#### 2.3. Support and professionalisation of educators

- Knowledge sharing should be facilitated: ongoing mutual learning and exchanges between educators;
- Transition to digital education requires time and energy of educators;
- Strong need for targeted/specialised professionalisation of educators;
- Purposeful system for professionalisation of educators: developed and organised efficiently that covers different needs of educators.





mpowering Higher Education in

#### Theme (3) Vision and Policy

- **3.1. Vision, change management & leadership** are identified as important aspects at institutional level;
- Commitment, involvement and mutual dialog with different parties,
   and policy implementation at all levels;
- To prioritise digitalisation at national level and development of policy
- **3.2. Internationalisation and digitalisation:** creating new opportunities; offers further international profiling of HE institutions
- 3.3. Role of digitalisation in the quality assurance system(s):

After the pandemic, quality assurance of digital education and processes should be included in the regular quality assurance system(s)



#### Theme (4) Funding and Infrastructure

#### 4.1. Funding: specifically allocated to digitalisation in higher education

Significant investments are done, at the European (RRF) and the national level, as a response to the highly digitalized education during the pandemic;

- Continuous basic funding for higher education is needed to support digitalisation in a sustainable way;
- Rollout of digitalisation requires sufficient staff, who has a suitable profile;
- The well-being of staff is important

#### 4.2. Infrastructure:

- Availability and accessibility of infrastructure;
- Digital tools and equipment, the provision of various technologies;
- Sharing of educational resources;
- Administrative processes and systems





#### (5) Other Themes

Role of developers of hardware/software in digitalisation

Privacy, data security, and other regulatory/legal aspects

Involvement of industry representatives in the development of study programmes

Psychological acceptance of change for the successful roll-out of digitalisation in higher education





#### **Next Steps:**

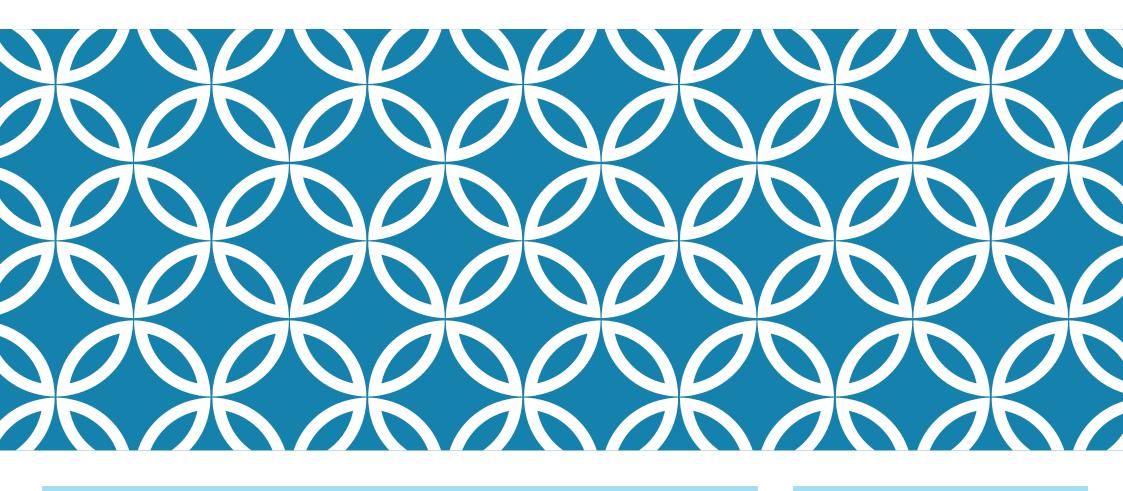
Latvia and Flanders will prepare separately the Guidelines on digital learning in higher education; then the Guidelines will be transnationally compared

**Broadening the Expertise during a Peer Learning Activity** 

Thank you for your attention and

your contribution during PLA!

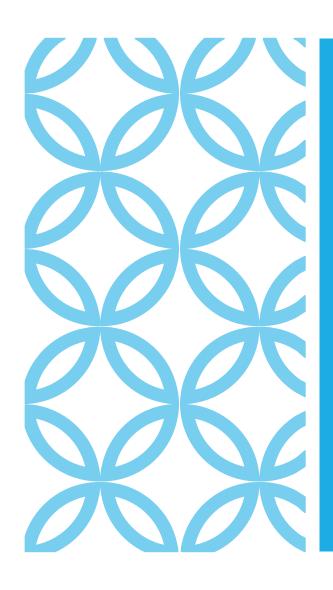




POWERHEAD PEER LEARNING ACTIVITY

Digitalisation in higher education: experiences from European countries part 1:

Greece



*E-University: the electronic students' register* 

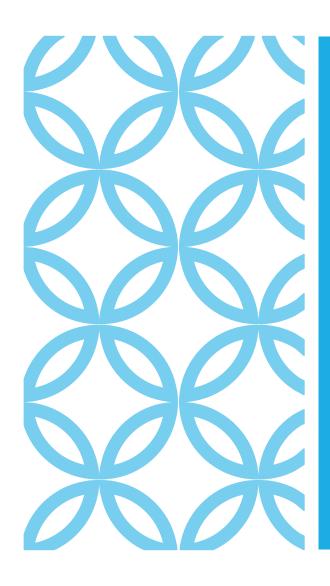
E-Diplomas: a degree register on a national scale

E-doatap: digitalization of the Greek NARIC archives, so that it can be accessible through a special e-platform

upgrading of the university coursebooks database

upgrading of the electronic system for managing the selection and promotion of teaching staff

NATIONAL ACTION PLAN OF THE GREEK MINISTRY OF EDUCATION AND RELIGIOUS AFFAIRS



curriculum design

update of administrative services

update and coordination of the traineeship services,

improvement of subsistence and accommodation services

possibility of identifying and authenticating all members of the academic community through the development of Identity Management infrastructure

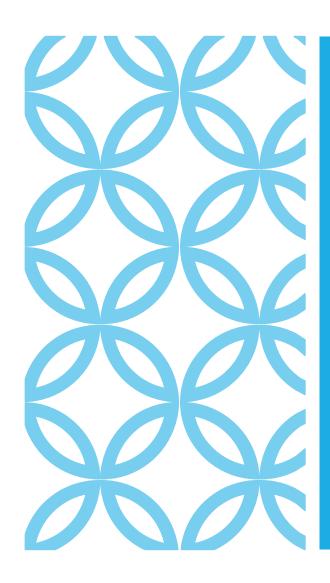
update of the HEIs Business Intelligence Hub,

adoption of the National Open Science Policy,

e: Presence service, enabling members of the Greek research and academic community to organize and conduct online teleconferences

Upgrading of Electronic Voting system in universities

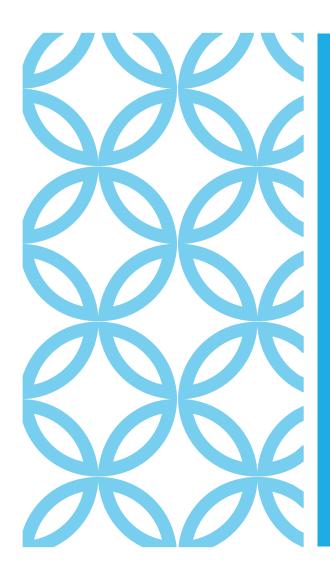
DIGITAL TRANSFORMATION STRATEGY 2020-2025 OF GREECE, CALLED ALSO THE 'DIGITAL BIBLE'



measures to ensure equal access to, participation in and completion of quality, affordable, relevant, non-segregated and inclusive education and training and acquisition of key competences at all levels, including higher education,

graduate tracking mechanisms and services for quality and effective guidance for all learners of all ages

PLAN FOR THE DIGITAL TRANSFORMATION 2021-2027



the internationalized institution,
digital transformation and capability,
entrepreneurial teaching and learning,
knowledge exchange and collaboration

#### OECD-EU PROJECT "HEI INNOVATE

- The COVID-19 pandemic has dramatically accelerated digital transformation, with transitions from in-person to online classes, straining students' skills and institutions' resources.
- As HEIs move beyond the COVID-19 pandemic, they will need to consider how digital transformation changes their education, research, engagement and management activities. (OECD/European Union, 2019[2]). HEIs must therefore set targets and introduce strategies to recover and benefit from the digital transition
- Greece took action to advance its digital transformation and capabilities
- In the pandemic, distance learning in Greece showed both strong signs of adaptability and a commitment to create the best possible digital environment for students and staff.
- The massive shift to digital platforms caused by the pandemic has presented new opportunities for internationalization of HEIs. Access to global experience has been greatly expanded, and the barriers to participation in international collaborations have been significantly reduced



#### Digitalisation in Higher Education University Perspective: GREECE

**Demetrios Sampson University of Piraeus** 

#### **Digitalisation - Post-Pandemic T&L in HE**

#### Curriculum

- global problems internationalization of the curriculum
- a smart citizenship curriculum digital sustainability & green intelligence
- prepare Youth as effective thinkers and ethical global citizens
- co-design with Industry and Labour Market representatives

#### Pedagogy

- rethink tradition lecture-based teaching strategies and support student-centered flipped and blended teaching
   & learning
- strategies for more engaged autonomous self-regulated (life-long) learners

#### Means – Technology

- unlock existing technologies & explore new technologies
  - online access to digital educational resources in multiple forms and multiple levels of interactivity moving well beyond text-books to interactive e-books, including Educational Resources enhanced with Augmented and Extended Reality
  - facilitate educational activities, such as online forum and discussions for community building and collaboration, experiments in remote and virtual laboratories, online visits and internships

#### Assessment of/for Learning

- Move beyond traditional summative paper & pencil exams:
  - integrate formative e-assessment strategies and personalised feedback
  - summative assessment based on students' e-portfolios, authentic learning and performance assessment exploring educational data collection and analytics
  - professional identity assessment for Individual Graduate profiling beyond an one-size degree for all

#### Leadership & Policies

- data-driven evidence-based responsible decision-making in institution performance evaluation and benchmarking
- flexible educational policies to facilitate educational innovations such as "on-demand" and "in-context" accreditation of labour market relevant competences through micro-credentials







Powerhead Peer Learning Activity - February 22, 2022

#### Digitalisation in HE: lessons from Germany

Alexander Knoth Oliver Janoschka Digitalisierung Kornelia Freitag CDO and Head of Section Digitalisation at German Academic Exchange Service (DAAD)
Head of Digital Programmes at Stifterverband and Managing Director at Hochschulforum

Vice President for Learning and Teaching and International Affairs at Ruhr-University Bochum

#### Introduction: What's Germany's problem?

#### **Digitalisation in Higher Education:**

- Germany does not have one single national strategy
- the Higher Education System is fragmented
  - federal state
  - institution focused: Universities/ Universities of Applied Sciences

#### **Reference to the "Needs Analysis":**

- Level of institutional development is missing

#### **Our Perspectives: A Mixture of...**

- ... Funding/ infrastructures
- ... Building communities of practice







#### DAAD's Funding Portfolio: Internationalisation meets Digitalisation

Perspective: International Mobility, Virtual Exchange and Collaboration across borders

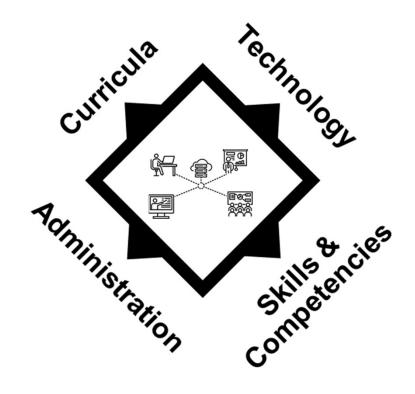
#### Target Groups (for funding)

- IMKD: (German) Higher Education Institutions and their international networks
- IP Digital: Study Programme responsibles
- IVAC: Lecturers/ Teaching staff
- ⇒ Four strategic dimensions of digitalisation
- ⇒ Community building is key (but difficult)











# Digitalisation in higher education in Germany perspectives from HFD



#### Hochschulforum Digitalisierung -German Forum for Higher Education in the Digital Age

Hochschulforum Digitalisierung (HFD) orchestrates the discourse on higher education in the digital age.

As an innovation driver, it informs, advises and connects stakeholders from higher education institutions, politics, business and society.

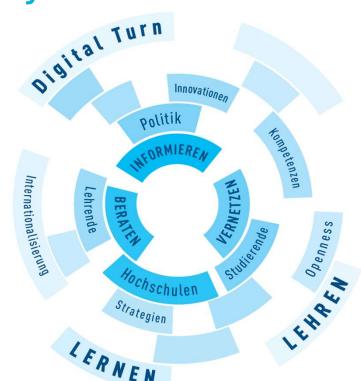
Founded in 2014, HFD is a joint initiative by Stifterverband, CHE Centre for Higher Education and the German Rectors' Conference (HRK). It is financed by Germany's Federal Ministry of Education and Research (BMBF).













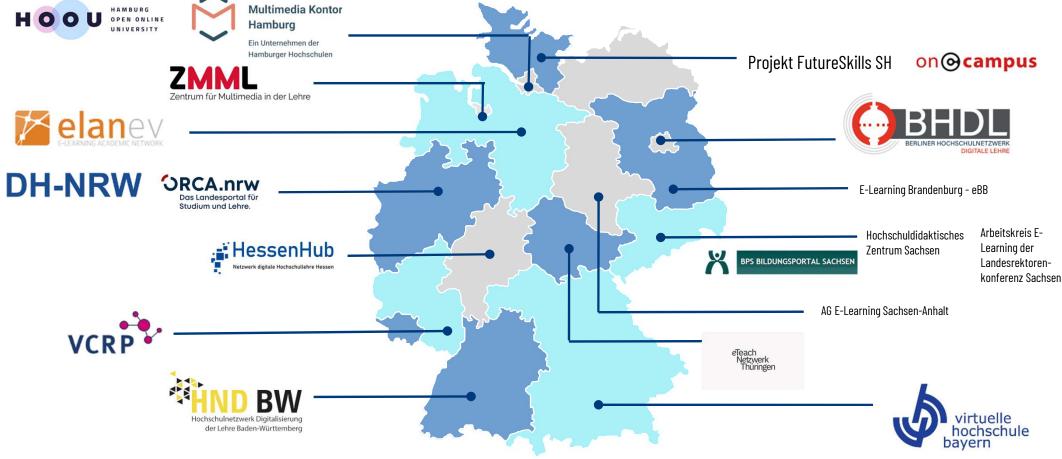


### Selection of developments in digitalisation in HE on the national level

- 2019: Commission of Experts for Research and Innovation (<u>EFI</u>) recommends: "digitalisation rate" pr. student for every HEI
- Since 2021: Foundation for Innovation in Higher Education: Joint long-term funding of federal and state governments for innovation in HE in different funding streams
  - 2021: First funding stream "Strengthening university teaching through digitalisation" with volume of 330M for 139 selected projects
- Dec 2021: New government: coalition agreement states e.g. that a new program for digitalisation in higher education will be established
- Funding 2021 to 2025: BMBF provides EUR 630 million for the "National Education
   Platform" (interoperable national ecosystem for teaching and learning on all levels)

#### Service infrastructure in the federal states







# Vision, policy and quality assurance

Development of digitalisation strategies in HE

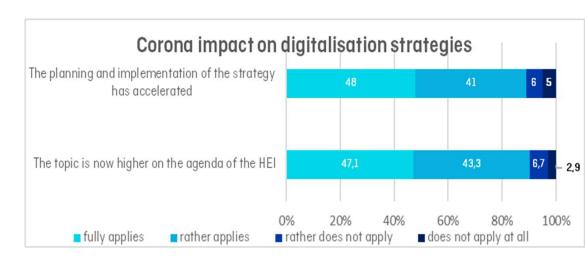
# Hochschulforum Digitalisierung

#### 2019: Only 14 % of German HEI had a digitalisation strategy



Source: 2019 Report of the Commission of Experts for Research and Innovation (Expertenkommission Forschung und Innovation - EFI)

# 2020/21: Corona accelerated the development of digitalisation strategies in HEIs



Source: HFD-Supportstudie, 2021, n=98-104

# Hochschulforum Digitalisierung

### HFD-Peer-to-Peer strategy consultation program for HEIs (P2P)

- established since 2017: 1-year accompanying process for higher education institutions (HEIs) to strategically strengthen digitalisation in teaching and learning at their institution
- holistic approach: addresses and includes HE leadership as well as other stakeholders such as students
- peer-based: HEI are supported by HFD and external experts ("peers")
- **impact**: enables up to **8 HEIs or alliances** annually in the nationwide program
- concrete outputs:
  - self-assessment report
  - consultation visit with workshops
  - recommendation report by the peers and the HFD
  - o P2P-network

#### **P2P in numbers**

2017-2021

24 consulted HEIs
161 applications of interest
from 128 HEIs
(3 collaborative applications)



# Course and curriculum design

"Hot topic" in German HEI: digital assessment



### HFD-Whitepaper "Digital Assessment in Higher Education"

- Urgent topic in the HEI community HFD Call for Community
   Working Group members in Spring 2021
  - → more than **80 members** from Germany, Austria and Switzerland engage in CWG in **7 thematic groups**
- >40 Co-authors provide expertise and summarise their lessons learnt and findings in the whitepaper, including 20 practical examples for assessment in HE
- Whitepaper provides an **overview** and **orientation** for HE staff and offers **recommendations**
  - → **English version** will be available in March



https://hochschulforumdigitalisierung.de/de/news/digitale-pruefungen-hochschule-whitepaper



# Students

From learner to transformation agents: The HFD DigitalChangeMaker Network



### Students as change agents: HFD-DigitalChangeMaker-program

- Annual program since 2018 with 12-15 selected students per year from different universities and disciplines all over Germany
  - DCM are students who are especially...
    - **motivated** to be involved in the digital transformation of their HEI  $\rightarrow$  collaborate across HEIs in thematic groups
    - lacktriangle engaged on local, regional and national level ightarrow represent student voices in public events and get others involved
- Various outputs, e.g. discussion paper on the "<u>Digital Turn from a student's perspective</u>" (2019), webinars and live sessions etc.
  - currently development of local DCM-groups

#### Goals of the DCM program



involve students
as partners and
drivers for
innovation

make student voices and positions heard enable students as change agents





# Digitalisation of L&T at RUB

### **Ruhr University Bochum**

Opened in 1965: 1st HEI in Ruhr Area

Research University:

21 Faculties: 5,800 staff: 3,500 teachers; 180 progr.

42,000 students: superdiverse student body

L&T Strategy since 2011 with focus on researchoriented teaching.

Digitalisation Strategy since 2018 (incl. separate implementation-plan per faculty)

L&T: research-, impact-, internationally oriented; European University of Postindustrial Cities: Virtual Interuniversity Campus















### Digitalization of L&T at RUB

- More than 20 years of E-Learning at RUB
  - lead in developing NRW "Studifinder" (university finding + self-learning tool), start 2012 2017, sold to Federal Office of Labor
  - o nation-wide survey of graduates of 2017 (KOAB): 35% RUB "high experience with e-learning" vs. 16% Germany-wide
- E-Learning Strategy
  - introduced in a participatory process 2016-18
  - o interconnects central strategy with faculty-specific concepts
  - university funding for faculty concepts
  - currently: monitoring and adapting
- Strong central support structure: Center for T&L, IT-Services, QM
- Special focus on student input and participation
  - student e-guides + student organized competition "5x5000" for more than 20 years
  - Re Covid crisis: university wide e-team digitalisation, in faculties e.g. PhiloLotsen









# RUB and E-Learning in North-Rhine Westphalia (NRW)

- NRW: most populous Federal State in Germany
- NRW: 42 public higher education institutions (HEI) with high autonomy
- NRW HEI autonomously cooperate with each other esp. in the area of L&T
  - (e.g. Working Group Vice Rectors L&T)
- NRW Ministry of Science and HEI institutionalized Cooperation: Digitale Hochschule NRW (DH NRW)
  - Foci: Research Infrastructure Teaching
    - coordination of cooperative projects: pilot projects at selected HEIs
    - e.g. pilot project KI:edu.nrw sounds out application of Learning Analytics and AI at RUB - for all HE
- RUB hosts DH NRW'S online repository for OER: ORCA.nrw









#### Online Resources CAmpus: ORCA.nrw

#### Jointly managed operational unit of all NRW HEI hosted by RUB:

- interconnects all cooperations of DH.NRW in the field of e-learning
- encompasses
  - Central OER repository (interconnected by search index with repositories of other federal states)
  - networked e-learning infrastructure (e.g. interface to local LMS, joint video server)
- complemented by
  - funding programs as incentives for teachers to produce OER (e.g. funding line "OER Content", separate projects up to 500.000 Euro)
  - training program "Teaching in the Digital Age" for all HEI in NRW
  - central legal information service on e-learning
- connected to NRW HEI by
  - o NRW-funded positions for networking at every NRW HEI ("Netzwerk Landesportal") to network and co-ordinate all ORCA activities within a



# DIGITAL TRANSFORMATION OF HUNGARIAN HIGHER EDUCATION

POWERHEAD 22-23. FEBRUARY 2022.

Dr. Laura Sinóros-Szabó, Ministry for Innovation and Technology

### **HUNGARIAN HIGHER EDUCATION SYSTEM (2019)**



students are **enrolled** in HE (2019)



**HEIs** (public, private or Church-owned) Most students were enrolled in state-maintained universities



earning premium of HEeducated workers (25-64) compared to those without HE, above the OECD average of 54% (2018)



14%

of HF students are international or foreign students, above the OECD average of 6% (2018)



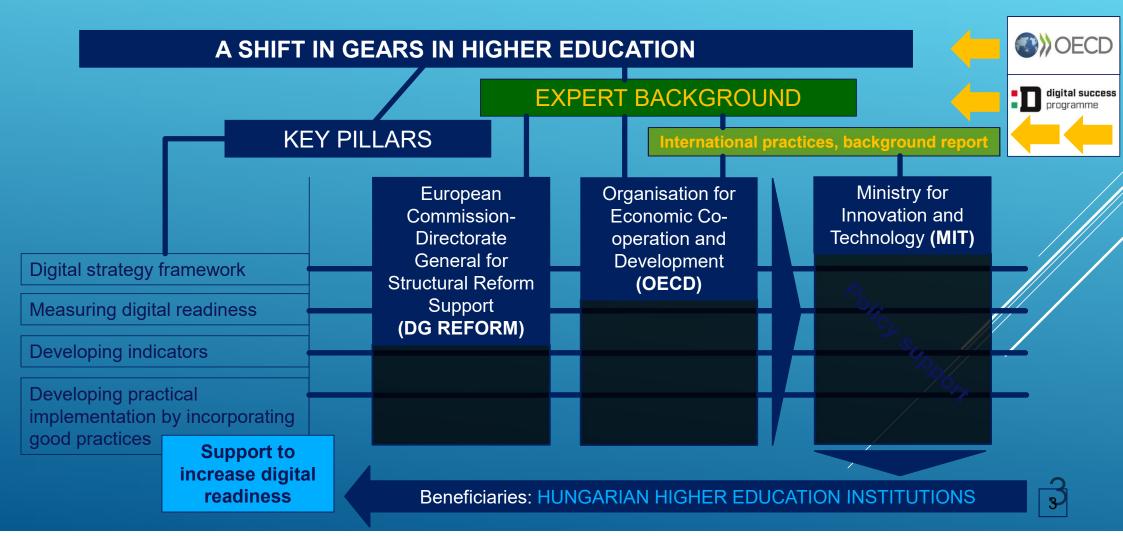
31%

of young people obtained a HE qualification, below OECD average of 45% (2019)



drop in the number of students who applied for higher education programmes between the academic years 2011/12 and 2020/21

# STRUCTURAL REFORM SUPPORT FOR HIGHER EDUCATION (UNDER THE SRSP)



# STRUCTURAL REFORM SUPPORT FOR HIGHER EDUCATION – OBJECTIVES





**Policy support** 

Supporting national authorities' initiatives to shape their reforms according to their own capacities, taking into account the initial conditions and the expected socio-economic impact.



Implementing the right process and methodology

Supporting the efforts of national authorities to define and implement the appropriate process and methodology, taking into account best practices and experiences from other countries



Development of ICT, teaching and learning methodologies, learning outcomes, any other identified areas

Supporting the Deputy State Secretariat responsible for Higher Education in the strategic development of a digital transformation framework for higher education

# STRUCTURAL REFORM SUPPORT FOR HIGHER EDUCATION – STATUS



1. Launch webinar organized July 2020

4. Fact-finding groups and stakeholder consultations took place February 2021

5. Evaluation report prepared April 2021

Stakeholder webinar and roundtable took place on 8th and 24th of September 2020

3. Expert interviews took place September – October 2020

6. Online expert meetings, indicators and guidance reports forged from April to July 2021

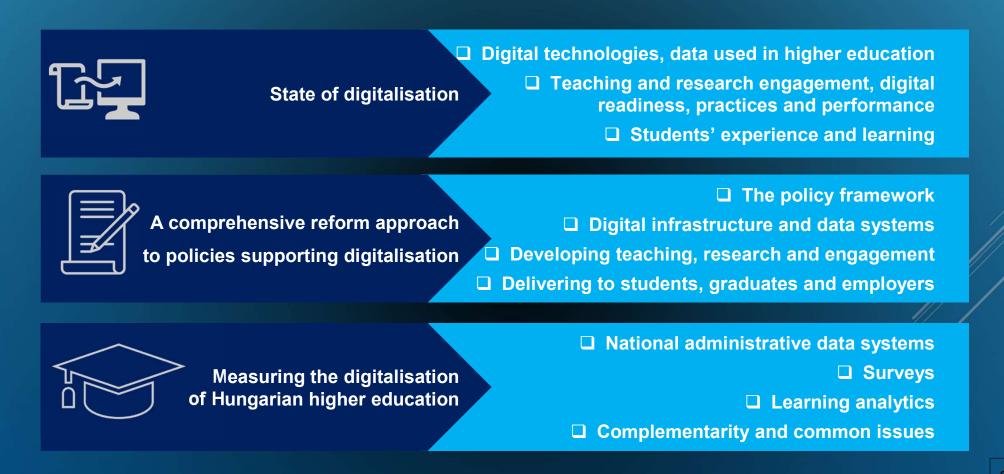
7. Measuring digitalisation in Hungarian higher education: indicators, data, methods webinar held - July 2021



8. Final report and evaluation in September 20219. Closing conference and public webinar to be held October 2021

# SUPPORTING THE DIGITAL TRANSFORMATION OF HIGHER EDUCATION IN HUNGARY – FINAL REPORT





### WHAT DOES DIGITAL TRANSFORMATION MEAN?

Availability of digital technologies

 Public policies supporting adoption of digital practices Digital readiness



Digital practices



Digital performance



How does digitalisation impact HE performance:

- Efficiency
- Quality
- Equity

 Use of digital technologies

 Adaptation of teaching and learning practices to digital environment

#### **DIGITAL READINESS**

90%

of student respondents to the OECD stakeholder consultation survey reported very good or sufficient access to digital devices and high-speed Internet

But challenges remain:

- 10% of students report insufficient access to basic digital technologies for learning (computer/high speed internet).
- More than 20% of students report insufficient access to online libraries and research databases
- 3 Nore than 30% of staff report insufficient access to mobile devices (tablets, smartphones)

#### DIGITAL PRACTICES

93%

of student respondents reported having used digital tools weekly or more often to prepare for classes and to attend lectures

75%

of teacher respondents reported using digital tools at least weekly for class instruction and student support

### But challenges remain:

- Around 40% of student respondents did not know if they have access to online career guidance services
- About 60% of students (and less than 50% of teachers) were confident their HEI carefully protected their personal data
- 75% of teachers (and more than 65% of students) prefer in-person instruction for small groups/classes

#### DIGITAL PERFORMANCE

of student respondents agreed
that online learning increased
their study skills, such as
autonomy and time management.

of teacher respondents
reported that online education
required them to teach in new
ways or identify new teaching
resources

- 1 About 50% of student respondents reported their teachers made effective use of digital tools to support teaching
- About 40% of students and 50% of teachers found online learning to generate more stress and less satisfaction than inperson instruction
- Fewer than 50% of teachers were confident in their ability to prepare students to be digitally competent upon graduation.

## NATIONAL POLICIES PROVIDE A FRAMEWORK TO PROVIDE DIGITAL HIGHER EDUCATION BUT CHALLENGES REMAIN

Digital Education Strategy

Shifting of Gears in HE Strategy

Data collection system

#### Objectives:

- Provide personalised learning opportunities via an online learning platform
- Respond to employers', students' and society's digital training needs
- Offer more flexible and diversified programmes

#### **Objectives:**

- Promote personalised learning
- Foster specialisation of HEIs and matching research goals
- Provide more flexible programmes

#### Three levels

- Student information management system
- Higher Education Information System (FIR) national data on students
- Graduate Tracking System and Taxation data - linked administrative data

#### Challenges:

- Constraints on funding for parttime study
- The legal framework for HE staff employment and accreditation processes not yet oriented to quality digital higher education

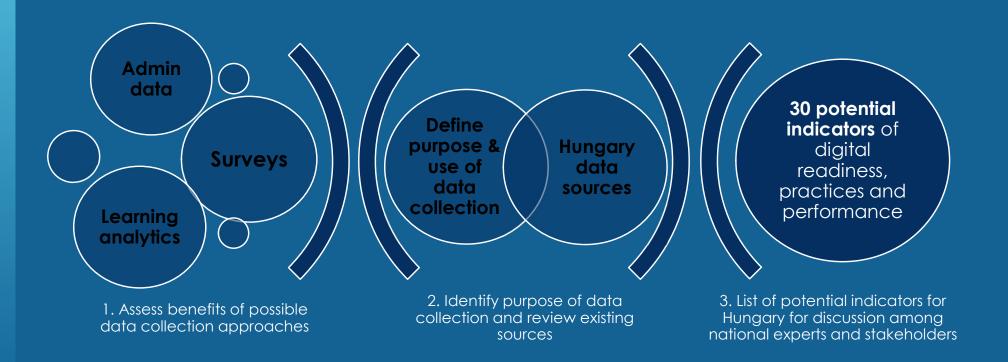
#### **Challenges:**

- Limited HEI engagement in design and implementation of strategy
- Multiple actions, but limited overall impact on the system's practices

#### **Challenges:**

- Current systems do not contain data on digitalisation
- Despite richness of current HE data, this data is not always used to support policy

#### MEASURING DIGITALISATION IN HUNGARIAN HIGHER EDUCATION



# ENSURING QUALITY DIGITAL HIGHER EDUCATION IN HUNGARY

### **INDICATIVE TIMELINE & KEY OUTPUTS**

O. Inception
Phase
(NovemberDecember
2021)

Launch event (18 November)

Project preparation

Inception Report (December 2021) 1. Desk Research (Months 2-9)

Hungarian QA landscape

International analysis of QA of digital provision

Brief analysis report on Hungarian QA (March-April 2022) 2. Stakeholder Consultations (Months 3-11)

HEI and
stakeholder
interviews
(January-February
2022)

Roundtable discussions (March-June 2022)

Report on international QA of digital provision (September 2022)

3. Recommendations
Phase
(Months 9-14)

Development of policy options (July-August 2022)

Stakeholder consultations (September-October 2022)

Draft Final Report on Policy Options (December 2022) 4. Final Conference (Months 15-18)

Publish Final Report on Policy Options (January-February 2023)

Closing event (March 2023)



WE WILL DO IT TOGETHER!



#### DIGITAL EDUCATION AT MISKOLC UNIVERSITY

- Different systems applied for digital education
- > Students' experience
- Possibilities of development and integration of the systems

#### DIFFERENT SYSTEMS APPLIED FOR DIGITAL EDUCATION

**Educational System** 

#### **NEPTUN** system

- ► Publishing subjects;
- Signing up for subjects and exams;
- Registering signatures, practical grades, exam grades;
- Sending official messages;
- ► Uploading schedules;

Learning Management System

Different platform of online education, i.e.

- ► Moodle;
- ► Google classroom;
- ► MOOC;

Communicational channels

#### Video communication

- ▶ Goggle meet;
- ► Microsoft Teams;
- Zoom;
- ▶ goToMeeting;
- ▶ Skype;

Text-based communication

- ► E-mail;
- Messenger;
- ► Social Networks;

#### STUDENTS' EXPERIENCE

- "I didn't like the one-day long waiting time to retake the test."
- "I prefered online education to personal education, because of the flexible time management of online courses, which provided me with the possibility of revising the teaching material for several times."
- > "I was difficult to fix an appointment and cooperate with other students to do teamwork."
- We tended to postpone the tasks because of the possibility of flexible time management."

### POSSIBILITIES OF DEVELOPMENT AND INTEGRATION OF THE SYSTEMS

- Integration of the three systems into one to make them more user-friendly and more efficient.
- Digital competence based development of skills both for lecturers and students.
- Risks of licence dependence of integration: annual licence fee, the issue of Intellectual Property rights, dependence on the service provider.
- New possibilites of data-based analysis of the performance of students.
- Introduction of new pedagogical methods.









Roland Szilágyi Ph.D.
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### Thank you for your attention.



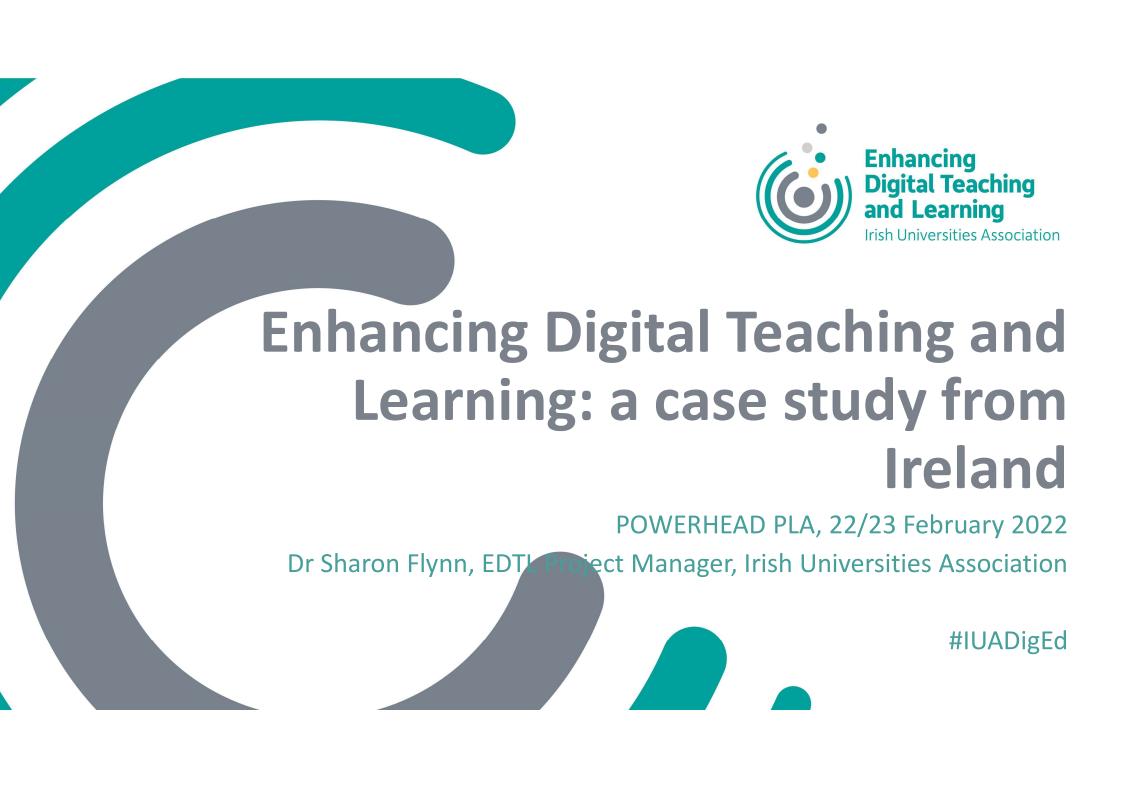












### Some preliminaries

Department of Further & Higher Education, Research, Innovation & Science funds and creates policy for the higher and further education and research sectors.

Higher Education Authority (HEA) has a statutory responsibility, at central government level, for the effective governance and regulation of higher education institutions and the higher education system.

National Forum for the Enhancement of Learning & Teaching is the national body responsible for leading and advising on the enhancement of teaching and learning in Irish higher education.

Quality & Qualifications Ireland (QQI) is the state agency responsible for promoting the quality, integrity and reputation of Ireland's further and higher education system.

www.**iua**.ie

Irish Universities Association is the voice of the university sector in Ireland.



#### National Context

New National Digital Strategy – Connecting Ireland, The Digital Ireland Framework – under development, will have a pillar on Skills

#### Teaching & Learning in a Digital World (NFETL)

- Enabling Policies
- Supporting Open Education
- Professional Development of staff
- Student Success



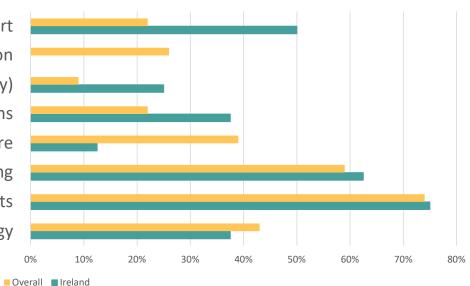


## Digi-HE Survey



# Top three enablers of digitally enhanced learning and teaching at your institution?

National initiatives and/or targeted funding support
International exchange and cooperation
Projects with other partners (e.g. industry)
Projects with other higher education institutions
Major investments in equipment and infrastructure
Professional development & training
Proactive participation of staff and students
Our strategy





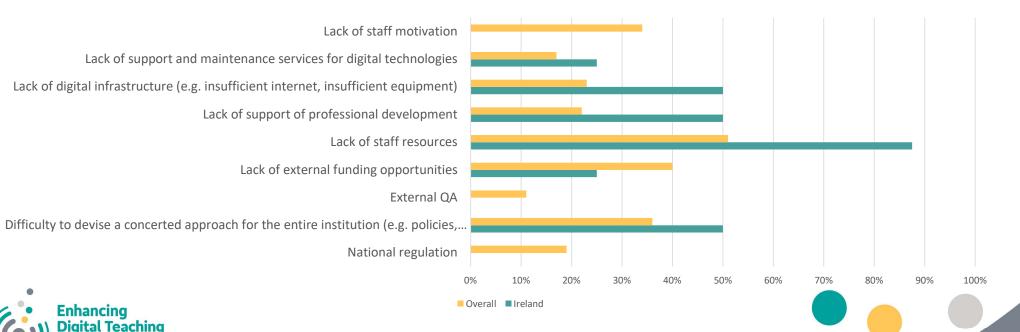


## Digi-HE Survey



www.iua.ie

#### Top 3 barriers to digitally enhanced learning and teaching at your institution





### Digi-HE Survey



www.iua.ie

What measures have been useful for improving digitally enhanced learning and teaching at your institution?

Use of a self-evaluation tool, which gathers data as a basis for a strategy discussion

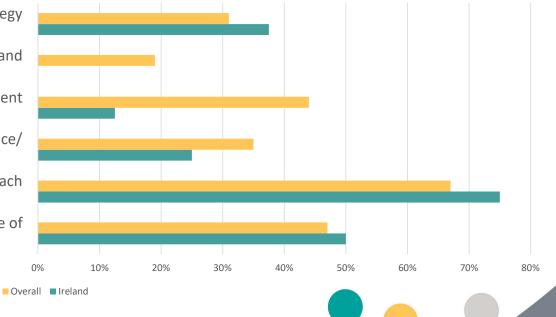
An audit-like process, to better understand the strengths and weaknesses of the institution

Collection and analysis of data and information on state of development and needs in different parts of the institution

Exchanges & collaboration organised by the rectors' conference/ university networks

Peer exchange within the institution – enabling staff to learn from each other

National or international training opportunities for staff in charge of digital transformation





# Case Study: Enhancing Digital Teaching and Learning (2019-2022)

Funded by HEA. Led by IUA. Involving 7 universities of IUA.

- Enhance the digital attributes and educational experiences of Irish university students
- Develop, pilot, review and roll out an ambitious staff development programme to enhance the digital confidence, skills and competences of those who teach in Irish universities





#### 4 Pillars



Not starting from zero



Pedagogy first

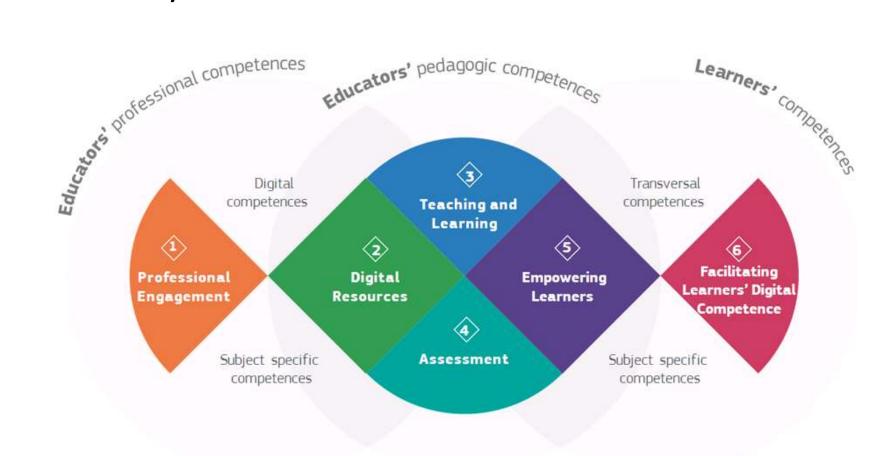


Discipline focus



Students as Partners

## University based activities



European Framework for the Digital Competence of Educators (DigCompEdu)

#### March 2020: Pandemic

EDTL Team co-ordinates a response to emergency remote teaching

Existing team work collaboratively to support effective remote teaching and learning for September 2020.

EDTL Approach places the student at the centre.

https://edtl.blog/the-edtl-approach/

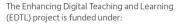






Planning for effective remote teaching during Covid-19:

The EDTL Approach for Modules





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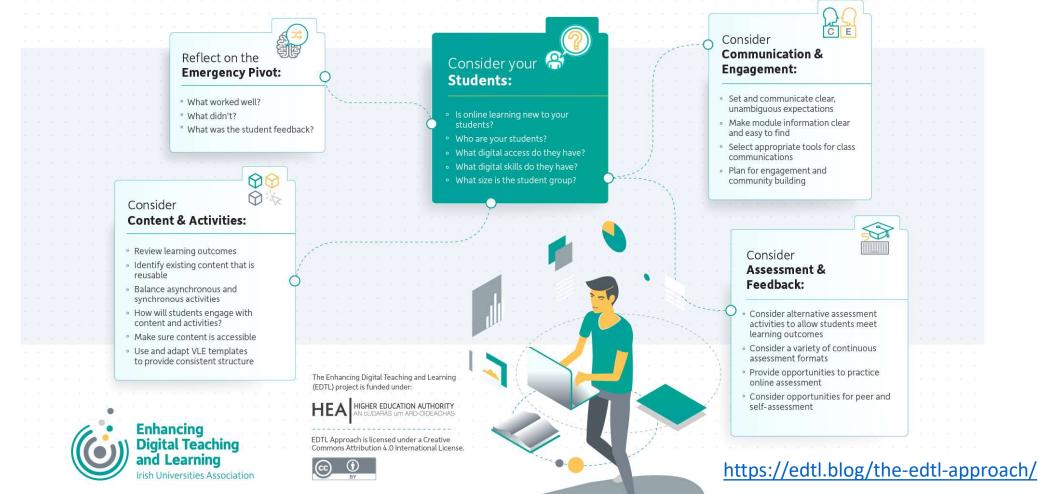




# Planning for effective remote teaching during Covid-19: **The EDTL Approach**

The EDTL Approach has been developed to support effective remote teaching in the context of COVID-19 and outlines a pathway with key

considerations for those who are adapting a module that is normally taught, wholly or partly, face-to-face.







**EDTL Approach for Students by Students** 



The Enhancing Digital Teaching and Learning (EDTL) project is funded under:



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# EDTL Approach for Students: Planning for effective learning in third level

Advice from the EDTL student team (for students, by students)





#### Stay organised

- Use an **online calendar to keep track** of assignment due dates and scheduled lectures.
- Check your student email and online learning environment regularly to ensure you are up to date with your course. Make sure you know what is taking place online and what is in-person, and plan accordingly.
- Create a weekly plan to give structure to your learning. This will ensure you don't fall behind, and know what your week looks like at a glance. Many college courses have full-time workloads, so expect to spend a good deal of time on college work even if you don't have many contact hours.

#### Keep in touch

- A great way to learn is by making study groups with other students! Asking each other questions, explaining topics, having discussions and peer-teaching are all brilliant ways to learn, as well as good ways to make friends.
- Make contact with your lecturers over email or through their
  office hours. Lecturers are happy to hear from students with any
  questions you may have and the details for getting in touch can
  usually be found on the course introduction page or during the
  first lecture.

#### Look after yourself

- Take breaks. We all are somewhat aware that you need to refresh
  your brain after a certain amount of time. However, when we get
  lost in the flow, we often forget to take breaks. Try to stick to this
  and see how you feel: for every 30 minutes you study, take a short
  10-15-minute break to recharge. Short study sessions are more
  effective and help you make the most of your study time.
- Eat and drink healthily and regularly. Nourishing yourself properly is important. Don't forget to drink enough water (and not too much coffee or energy drinks) and stick to a reasonably healthy diet.
- Use textbooks or a stand to prop up your screen to eye-level to reduce neck strain. Download applications which filter out blue light on your devices to reduce eye strain.

#### **Utilise technology**



- Learning technology is useful, even when teaching is in-person. Research software that can help with accessibility or make you more productive, such as applications that temporarily block distracting websites, organise your notes, or help you revise.
- Online tools such as Google Docs allow you to share useful notes and resources with fellow students easily, easing your individual workload.
- Familiarise yourself with your university's virtual learning platform. There are many guides available online which will help you master whichever platform your university uses.



#### Find your space

- Find out where there are facilities like electric sockets, strong wifi, quiet rooms, and study spaces on campus.
- Find a quiet, well-lit space to engage in online learning.
- Your college library will have study spaces and a range of useful services both online and in-person. Many libraries have laptops for student use. Many library books may only be available in physical form.

#### Prepare for disruption

- Timetables may change suddenly with restrictions, and it is important to keep up to date with what arrangements are for your lectures and tutorials.
- Have a discussion with household members about when you will need the internet for live lectures and ask them to stay off of bandwidth-intensive services during these times
- Take note of your lecturers' contact details in case you need to get in touch regarding being unable to submit an assignment or attend a lecture.

#### Communication is key



- If your course offers 'breakout' sessions to have relaxed conversation with fellow students, try and attend regularly to avoid feeling isolated in your course. Peer connection is often vital to learning.
- It can be tempting to always stay quiet in lectures but try
  and contribute when you get the opportunity. This is a
  great way to ensure you understand the material and have
  any questions answered. For online lectures you can use
  the chat function if you do not feel comfortable speaking.



The Enhancing Digital Teaching and Learning (EDTL) project is funded under:

HEA HIGHER EDUCATION AUTHORITY
AN EUDARAS UM ARD CIDEACHAS

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https://edtl.blog/the-edtl-approach-for-students-by-students/

## #IUADigEd Community & Webinar Series

- Launched in January 2020.
- Grew from 30 members at the beginning of March 2020, to 500+ by September. Currently at ~750 members.
- Regular webinars, recorded and available under open (CC) license.
- Student-led webinars particularly popular







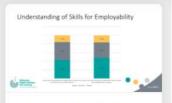
Student Perspectives: Motivation for Learning | 31 January 2022



Framework for Ethical Learning Technology | 17 January 2022



Approaches to digital skills development for students | 29 November 2021



What are the Digital Skills that graduates need? | 15 November 2021



Student Perspective: Back on Campus | 1 November 2021



Developing a Shared Culture of Commitment to Academic Integrity: A Student-Staff Partnership Approach | 18 October 2021



I'm an Academic, get me out of here! | 11 October 2021



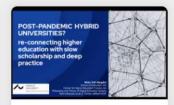
Flippin' Zoom & Collaborative Teaching of Engineering and Architecture students online | 27 September 2021



Teach Digi 'Ag Caint': An Approach to Staff Digital Education Training through Conversation | 23 August 2021



DEPTH Study: An Investigation into Technology's Role in Inclusive Digital Education | 26 July 2021



Post-Pandemic Hybrid Universities: Re-connecting higher education with slow scholarship and deep practice | 28 June 2021



Moving Labs Online, What did we Learn? | 14 June 2021

https://edtl.blog/webinar-series/

## Student Campaign (April – May 2021)

- Your Education, Your Voice, Your Vision
- Social Media campaign to crowd source students' vision for learning in higher education in an ideal world
- Full results at

https://edtl.blog/your-education-your-voice-your-vision-campaign-results/





#### Your Education, Your Voice, Your Vision **Poll Results**

The Your Education, Your Voice, Your Vision campaign by the IUA Enhancing Digital Teaching and Learning in Irish Universities project, aimed to crowd-source the vision for university learning in a post-Covid environment; challenging third-level students across Ireland to project themselves into the post-pandemic future and imagine their learning experience. Our goal, is to use students' remote learning and assessment experiences to help create a better and brighter future for third-level education in Ireland. We want to imagine a future that caters for every student in Ireland, where no one is left behind.

The Your Education, Your Voice, Your Vision campaign ran from the 17th April 2021 – 10th May 2021 via Instagram, TikTok and Facebook.



In an ideal world what does your learning in a lecture look like? Sample size: 4,703



IN PERSON. **ON CAMPUS** 

OR RECORDED

In an ideal world where will you study for assessments?

Sample size: 4.192



ON CAMPUS



In an ideal world how much time will you spend on campus? Sample size: 2,965



1-3 DAYS **EACH WEEK**  In an ideal world what does your assessment look like? Sample size: 3,594



19% MOSTLY END OF TERM EXAMS



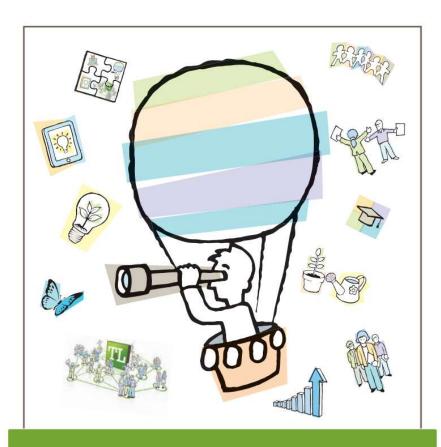




## Open Course for Educators







NATIONAL PROFESSIONAL DEVELOPMENT FRAMEWORK FOR ALL STAFF WHO TEACH IN HIGHER EDUCATION







## You'll Learn to

- Reflect on how you currently use technology to support your teaching (or support student learning) and identify any areas where digital technologies could be used to enhance your teaching.
- Acquire (and demonstrate) a digital skill that will support your teaching practice.
- Plan a new or enhanced teaching activity that makes best use of technology for your context.
- Plan how you will evaluate the success of the new activity.





#### Some details

- 6 unit/week course, approx. 25 learner hours
- Mostly self-paced, 2 live webinars (recorded)
  - Unit 1 = self reflection (DigCompEdu)
  - Units 2,3 = explore & demonstrate a new skill
  - Units 4,5 = plan a digital enhancement
  - Unit 6 = claim your badge (produce evidence within a peer learning group)
- Does not provide technical training, rather imparts a structure for individual exploration and development





#### Next Steps

- Review & revise GSPPDC course
- Offer facilitator led version in Spring/Summer 2022
- Local/institutional versions
  - Embed into accredited CPD
  - Offered as stand-alone non-accredited formal CPD
- Materials will be available to download from NFETL and EDTL websites







# Digital Education Action Plan 2021-2027: Focus on Higher Education sector

Chrystalla Petridou
DG Education, Youth, Sport and Culture
Directorate C: Innovation, Digital Education and International Cooperation
European Commission
23 February 2022

#### **Political Context**













Political guidelines of the President von der Leyen

Digital Education Action Plan (2018-2020) COVID-19 pandemic and upsurge in distance and online learning

A Europe fit for the Digital Age

Next Generation EU Digital Decade



# Digitalisation in Higher Education Drivers



Internationalisation



Student and Staff Exchange



• Distance, online, blended learning





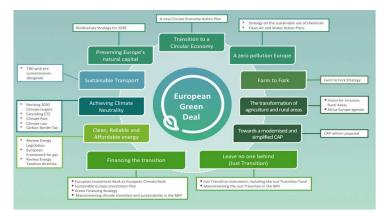
 MOOCs, Open Education Resources



Digital credentials



# Digital Skills in Higher Education Drivers









## Health Crisis – Lessons Higher Education



- Higher level of preparedness
- Acceleration of digital transformation





- Slow system-wide take-up of effective digital education practices
- Online teaching and learner engagement



## Higher Education – Institutional Level

Commitment and vision from the leadership



Holistic, well-designed and integrated strategy



 Use digital capacity to promote sustainable and inclusive innovation and entrepreneurship

 Open Education, Open Science, Open data to increase impact on ecosystems



## Higher Education – Learning







- Learner engagement
- Assessment, exams, selection and admission of new students







- short-term learning opportunities
- flexible provision for degree programmes
- adult learners and professionals looking to re-skill or upskill



## Higher Education – Content and Delivery

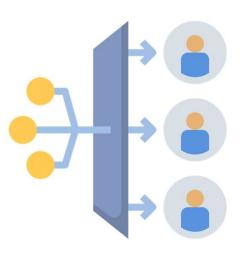




- High quality digital content
- Inclusive, multilingual, accessible
- Instructional design expertise



## Higher Education – Online Learning Platforms



- Leading MOOC platforms are outside EU
- MOOC production is twice as prevalent in the US in comparison to the EU
- EU higher education institutions are less intensive MOOC producers than US
- EU offer of MOOCs is unevenly distributed across Member States, with France, Spain and Italy being the leaders in absolute numbers



## Digital Education Action Plan (2021-2027)

Key enabler for European Education Area and the new Skills Agenda



- An integrated approach for technology use in education and improving digital skills;
- Wide scope- beyond formal education and including lifelong learning;
- Duration of seven years, aligned with the programming period of the EU;
- Strong focus on quality and inclusion;
- Transforming education for the digital age is a task for the whole of society.

#### Focus

Two strategic priorities with one goal: high-quality and inclusive digital education



#### Strategic priority 1

Fostering the development of a highperforming digital education ecosystem

#### Strategic priority 2

Enhancing digital skills and competences for the digital transformation



Priority Area	Actions	
Fostering the development of a high performing digital education ecosystem	Enabling factors for successful digital education-CR	
	Online and Distance Learning for Primary and Secondary Education-CR	
	European Digital Education Content Framework and European Exchange Platform	
	Support for connectivity and digital equipment for education	
	Digital transformation plans and digital pedagogy and expertise	
	Ethical guidelines on AI for educators	
Enhancing digital skills and competences for the digital transformation	Tackling disinformation and promoting digital literacy through education and training	
	Digital Competence Framework update	
	European Digital Skills Certificate	European
	Improving the provision of digital skills in education and training-CR	Digital Educat Hub
	Digital competence benchmark	
	Digital Opportunity Traineeship	
	Women's participation in STEM	



#### **DIGITAL EDUCATION ACTION PLAN**

2021 - 2027

- ➤ Developing a digital education Community (CoP): For 2022:
  - 1. Focus areas incl. interoperability, digital education content and digital assessment.
  - 2. Collecting and disseminating knowledge and best practice: Online page of HUB under European Education Area Portal
  - 3. Co-creation and acceleration of solutions for education and training
- ➤ Group of National Advisory Services: interface between Hub activities and the Member States
- ➤ Digital SALTO Resource Centre for Erasmus+ and European Solidarity Corps programmes



## Digital opportunities within Erasmus+

#### **Key Action 1 (individual mobility):**

- ➤ **Digital Opportunity Traineeships** for students and recent graduates: (DOTs) to boost digital skills necessary for the future including in forward-looking fields, such as programming, cybersecurity, data analytics, digital marketing, development of apps, software and websites, as well as training of robots and artificial intelligence applications;
- ➤DOT scheme for HE **staff**, encompasses training with a focus on boosting digital (pedagogical) skills.

**Key Action 2 (cooperation partnerships):** Digital as one of the horizontal priorities but also very present in the HE specific ones

➤ E.g. developing and/or implementing **Digital Transformation Plans** of higher education institutions. (Ddl 23/03/2022 Info in Erasmus+ <u>Programme Guide 2022</u>

#### Digital opportunities within Erasmus+

- **≻Key Action 2 (Forward-Looking Projects):** 
  - Forward-Looking Projects are large-scale projects that aim to **identify, develop, test and/or assess innovative (policy) approaches** that have the potential of becoming **mainstreamed**, thus improving education and training systems.
- ➤ Proposals for the digital priority under Lot 1 (Call 2022), will support **high quality and inclusive digital education**, in line with the aims of the **Digital Education Action Plan**, and projects will address specifically at least one of the following three areas:
  - Key success factors for inclusive and high quality digital education and training;
  - Artificial Intelligence in Education;
  - High quality digital education content.



#### Education in Recovery and Resilience Plans

- RRF is advancing reforms and investments that will boost modernisation od education systems, improve their resilience and accelerate their digital and green transitions.
- Measures put forward by M/S aim to improve the quality, inclusiveness and effectiveness of education and training across all levels and sectors.
- Based on the RRPs already adopted investments and reforms related to education account for approximately 10% of the total package
- Approx. 30% of the total spending on education is devoted to digital education, a key focus of nearly all national plans.



## Other important policy Initiatives for HE Skills Agenda /European Education Area

#### **European Strategy for Universities:**

'Support the full engagement of universities in unfolding green and digital transitions. The EU will only meet its ambitions on equipping more young people and lifelong learners with digital skills .....if the higher education sector pulls its weight

### Thank you

#### EAC-DIGITALEDUCATION@ec.europa.eu







Acceleration plan educational innovation with IT POWERHEAD meeting – 22 & 23 Febr 2021 Johanna de Groot, SURF



#### **Background Acceleration plan**

- 4 year programme, started januari 2019, we are now in our last year (!)
- Collaboration between
  - The Netherlands Association of Universities of Applied Sciences
  - Universities of the Netherlands
  - SURF
- Budget of 17,5 million Euro provided by ministry of Education; In kind financing by institutions is estimated at 65 million Euro.



Universities of The Netherlands





#### **Ambitions**

The possibilities that IT offers are growing at an unprecedented rate. We have every reason to invest heavily in the use of technology in order to accelerate educational innovation in higher education in the Netherlands.

Overall goals of the Acceleration Plan:

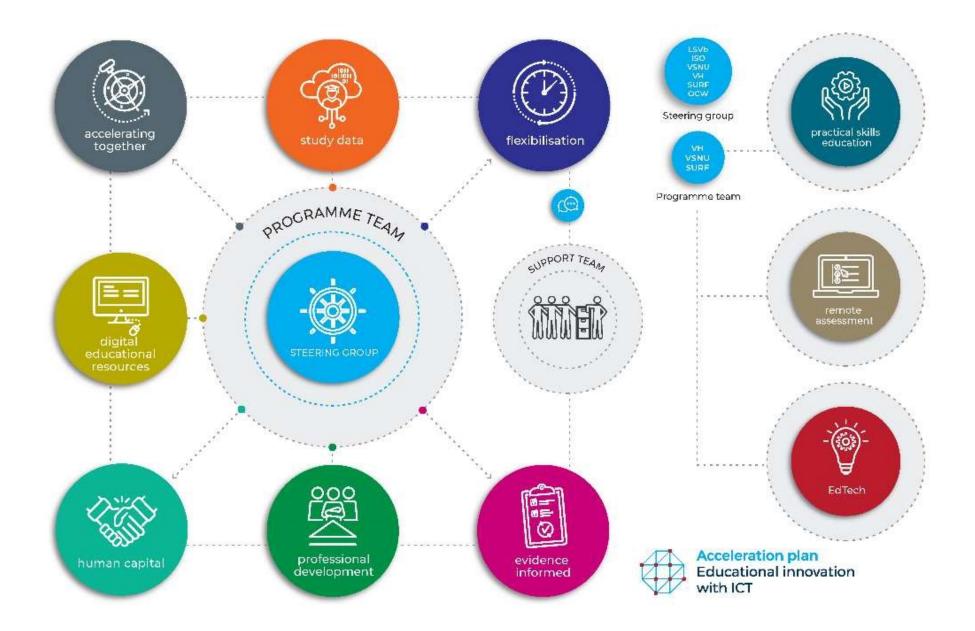
- Improve job market connection
- Make education more flexible
- To learn smarter and better with technology





#### Facts and figures:

- 39 higher education institutions
- 120+ people





#### Governance

Steering group consists of

- 2 board members from research universities
- 2 board members from universities of applied sciences
- 1 board member from SURF
- 2 board members from student unions
- Ministry of education is present at steering group meetings

Teams consist of 4 - 19 experts from HEIs; they participate for 0,1 fte (4 hours per week) on HEI-budget.

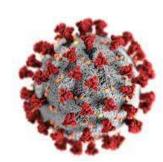
Experts from HEIs are team-leads; they are paid from programmebudget

Each team has a 'connector' that is responsible for connecting to national developments and to the other teams in the programme. The connector is paid from programme-budget.



#### Response to COVID-19

- Two new working groups started in the summer of 2020
  - Remote assessment
  - Practical skills education
- Knowledge exchange through <u>a digital communities platform</u> started May 2020
  - >900 active followers of the platform and >1500 followers on LinkedIn
  - Staff and students from HEIs can post on the platform
  - Webinars on urgent topics (~2 per month)
  - Focus is on exchange of practical knowledge and experience regarding educational innovation





#### Reflection

#### Lessons learnt

- Pick your team leads wisely
- A core team (preferably of 2-3 people) per zone that activates and guides the whole team
- Time is needed to develop as a team and agree on joined goals

#### Success factors

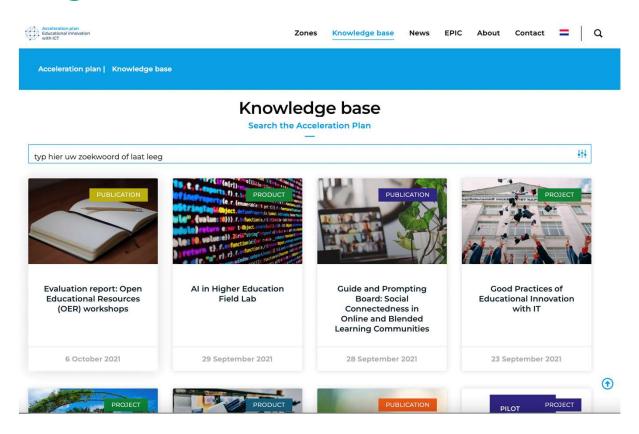
- Teams choose their own goals and way of working bottum up approach to the work gives great energy
- Teams collaborate on concrete products, funding is available to speed up and deliver
- Combination of bottom up initiatives with commitment at top-level

#### Challenges

- Adoption of developed innovations in HEIs
- · Keep the enthousiasm and energy in the team
- Focus on sufficient concrete products, output, and results



#### Knowledge base





On the digital transformation in higher education

2022

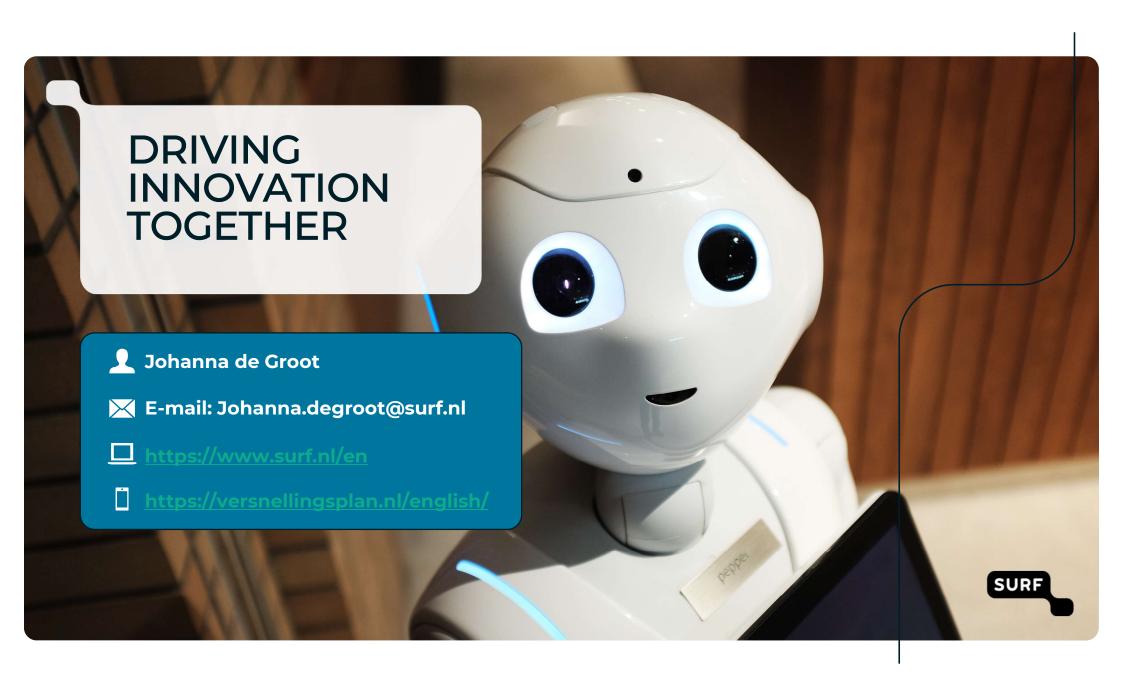
Join us for EPIC on 30 & 31 May, and 1 June 2022 in Rotterdam, The Netherlands

www.epic-conference.nl











#### Pilot microcredentials

Project runs from aug 2021 until the end of 2023

- 32 HEIs participate
- High potential for use in Life Long Learning
- · Developing a national policy on microcredentialing
- Agreeing on standards for description of microcredentials and on quality assurance





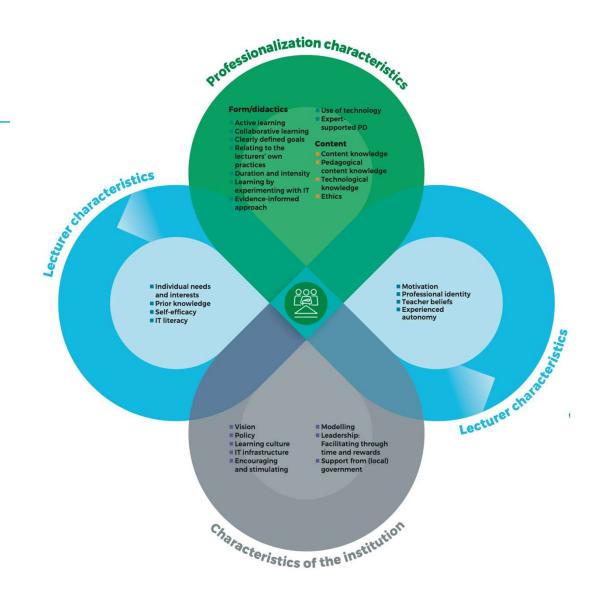






## Toolkit for effective lecturer professional development

A toolkit for setting up and evaluating effective professional development for lecturers on educational innovation with IT



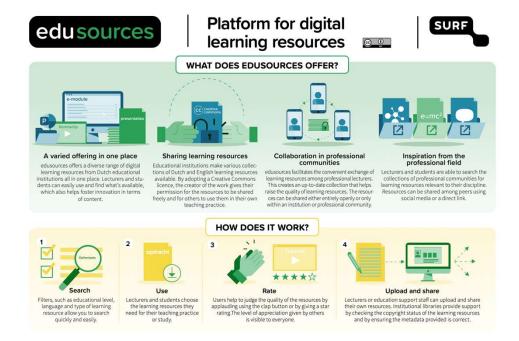


#### **Sharing learning resources**

#### Pilot infrastructure digital learning materials

- Based on SURFs Edusources platform
- 25 participating HEIs
- Goal is
  - Further development of the Edusources platform
  - To increase the amount of content on the platform
  - Establishing a national supportdesk for HEIs

National agreement on ambition for open and digital learning materials (febr 2022)



## Students' view on digitalisation

**POWERHEAD PLA** 

23 February 2022

Ruben Janssens



Fighting for students' rights since 1982











The European Students' Union (ESU), Mundo-Madou. Avenue des Arts 7/8, 1210 Bruxelles

# Why do we want digital learning?



#### Opportunities of digital learning

Making education more...

Student-centred

Accessible

**International** 

Flexible

Well-rounded



#### Opportunities of digital learning

Diversity of learning and delivery methods

- → Better fit learners' needs
- → Provide necessary flexibility for diverse learner group



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# Digitalisation is a tool, not a goal in itself



# What is ideal digital learning?



#### Student-centred learning

Putting the **learning** before the **teaching** 

Adapting the learning path

to students' context and needs



#### **Interaction**

Digitalisation should increase interaction, discussion, active participation

**Relationships** are important

Digital and face-to-face **complement** each other

Digital learning should stimulate dialogue by design

→ adjust learning activities to this



# How do we achieve ideal digital learning?



#### Institutional plans

#### Center of digitalisation strategies

- = impact on students' learning
- = how to improve quality & accessibility

#### **Core questions**

- 1) How can digitalisation enhance students' learning?
- 2) How can students be involved in every step?
- 3) How can the **necessary resources** be allocated?



#### **Involvement of students**

Involve stakeholders in every step

- **conceptualisation** of digital learning activities
- choosing or developing digital tools and platforms
- continuously during implementation
- **→ evaluating** the effects

Constant feedback loop necessary

conscious integration in QA systems



#### **Necessary resources**

#### **Infrastructure**

Reliability

Accessibility

Security

#### Staff and students

Pedagogical skills

Digital literacy

Time and recognition for developing learning methods

Support resources



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# Digitalisation can never be an excuse for reducing investment



#### **EdTech sector**

Digital platforms should conform to pedagogical visions and user experiences

NOT the other way around!

Critical view towards **relationship** with EdTech companies

- → active collaboration
- → analyse student and teacher needs
- → collaboration between HEIs and countries



# Online proctoring



#### Online proctoring

Sudden, widespread use of online (automated) proctoring tools

Very invasive to students' privacy

Contribute to stress and discrimination

**Detrimental for mutual trust** 

prefer positive promotion of academic integrity through education

#### **Necessary**:

- 1) Limit use of online proctoring to specific situation, with student consent
- 2) Develop ethical guidelines for use
- 3) Develop tools with ethical and privacy considerations in mind



# Big Data and Artificial Intelligence



#### Uses of data & AI

**Learning Analytics** 

Collect data from students

**Analyse** the data

**Use** insights to improve learning

Tests, assignments, quizzes, ...

Interaction with digital learning environment

Interaction with physical learning environment

Academic history

Research on learning and education

Optimising and personalising learning environment

Study track counselling-



#### **Uses and risks**

Improving quality and accessibility

more individual guidance and adaptation

#### Risks:

- data security and privacy
- → over-assessment,
- loss of personal context and contact



#### Requirements for Learning Analytics

#### Data

- → students are owners of their data (privacy by design)
- → active consent
- → anonimise & aggregate
- □ clear access control

#### **Pedagogical**

- do not use for denying access or assessment
- → do use for personalised guidance and improving activities
- allow diversity of methods
  - → do not diminish personal perspective
- involve students and teachers



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## Students cannot be reduced to numbers



#### **ESU Policy Papers**

**ESU Statement on Digitalisation** 

https://www.esu-online.org/?policy=digitalisation-statement

ESU Policy Paper on the Quality of Higher Education

https://www.esu-online.org/?policy=bm81-policy-paper-on-quality-of-higher-education-2021

ESU & ESN Position Paper on mobility, virtual exchange and blended learning

https://www.esu-online.org/?news=esu-and-esn-launch-a-joint-position-paper-on-mobility-virtual-exchange-and-blended-learning

**ESU Mental Health Charter** 

https://www.esu-online.org/?policy=2020-mental-health-charter





#### Contact us!

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Ruben Janssens Executive Committee, European Students' Union

Fighting for students' rights since 1982











The European Students' Union (ESU), Mundo-Madou. Avenue des Arts 7/8, 1210 Bruxelles



#### Next steps

POWERHEAD project
Empowering Higher Education in Adopting Digital Learning







Work package 6: Guidelines on digital learn	ning in	higher	educa	tion											
6.1 National working group in Flanders	3667	100					) (1) 2 (2)	6 10 4 63							
6.2 National working group in Latvia		30	Ž.	100	8) /		9 19	. 3							
6.3 Transnational steering group preparing common guidelines in Latvia		3	38								Si 9	87			
6.4 Report of the transnational steering group		33	3K			4 4			3	>	86 38			8	16
6.5 Redaction and publication of guidelines															
Work package 7: Dissemination of results															
7.1 Transnational steering group preparing the conference online meeting															
7.2 Dissemination conference in Flanders		63						1 0			9 1				
7.3 Dissemination at international fora (all partners)		8	6			8 8		3 2	6	•	× 3	9 2			





WP3	WP4	WP5	WP6	WP7
Setting the stage	Needs analysis	Broadening the expertise	Guidelines on digital learning in HE	Dissemination of results

#### WP6: Guidelines on digital learning in HE

Timing: February 2022 – June 2022

Deliverable: Publication of guidelines





#### 3. Methodology

#### WP6: The guidelines on digital learning in HE

	6.1 Preparation: National work	6.2 Transnational steering group	6.3 Publication online and on paper				
Timing	February – June 2022	June-July 2022	July-October 2022				
Objective	Process the information	Agree on the guidelines	Put together the findings				
Rationale	If all the gathered information is put together, what guidelines or recommendations can be assembled?						
Activity	National working groups in the participating countries	2-day seminar	Desk work of the project managers				
Methodology	/	In-depth discussion of the conclusions	Publication				
Deliverable	Summary of conclusions of the participating countries	Guidelines for national policy and HEI on digital learning					



WP3	WP4	WP5	WP6	WP7
Setting the stage	Needs analysis	Broadening the expertise	Guidelines on digital learning in HE	Dissemination of results

#### **WP7: Dissemination of results**

Timing: August 2022 – November 2022

o Deliverable: Dissemination conference





#### 3. Methodology

#### WP7: Dissimination of the results

	7.1 Preparation of the conference	7.2 Disseminiation conference	7.3 Disseminiation on other fora				
Timing	August-September 2022	September-October 2022	October-November 2022				
Objective	Agree on content	o other EHEA-countries					
Rationale	The guidelines can be used by other countries						
Activity	International conference	Participation of the project team in international fora					
Methodology	Transnational steering group prepares the program	Organisation of and presentation on the dissemination conference	Pesentation on other fora				
Deliverable	A dissemination conferer	PowerPoint and poster					