Common guidelines

POWERHEAD

01

Preface: about the common guidelines

1.1.   Goal of the guidelines

POWERHEAD aims to answer following questions:

- How can digital learning in higher education be stimulated?
- How can national authorities support higher education institutions on digital learning, given their autonomy?
- How can higher education institutions further shape their digitalisation policy?

This document contains common recommendations on how national/central governments and higher education institutions can enhance digital learning in higher education. The target groups of these recommendations are thus national/central governments and higher education stakeholders (higher education institutions, students, academic and support staff), and other parties concerned.

During the pandemic, higher education institutions (HEIs) in Europe have been forced to rapidly implement digital education on a large scale. Even today, there are still many remaining questions among actors in higher education. The most important open question is what higher education will look like in the long term. These recommendations are meant to help shaping this long-term policy on digitalisation post-COVID-19.

1.2.   Structure: guidelines per theme and per actor

The recommendations are structured in two ways:

1. In the first part of the document, the recommendations are divided per theme:
1) Vision, Policy and Quality Assurance, 2) Skills and Digital Readiness, 3) Students, 4) Course & Curriculum Design, 5) Funding and Infrastructure, and 6) Cooperation and Stakeholders.

There is no dedicated section for educators and teaching staff. However, they are a very important group in teaching and learning processes and are an integral part of all aforementioned topics. Therefore, recommendations regarding educators and teaching staff are incorporated throughout the whole document.

2. Later in this document, the recommendations are clustered in an abridged form per actor.
This part provides a synthesized overview of the same recommendations, organised per actor: higher education institutions, national/central governments and the European level.

Pow**E**r
h**E**ad
mpowering Higher Education in
Adopting Digital Learning

02

Recommendations per theme

2.1.   Vision, Policy and Quality Assurance

Develop a robust and solid long-term vision and strategy on digitalisation in higher education. Set goals in accordance with the vision and devise plans on how to reach those goals. Streamline the vision at various levels within the higher education institutions, at regional, national and European level.

1

For higher education institutions:

- Develop an evidence-informed vision and strategy on digitalisation.
- Set long-term goals for digitalisation and devise plans on how to reach those goals.
- Monitor the roll-out of the institution's vision and think about the role that data can play.
- Align this vision with key national and EU policies such as the Digital Education Action Plan 2021-2027, the European Education Area framework and the 2030 Digital Compass[1].
- Involve all actors within the institution in developing the policy, and streamline the vision at various levels at the institution. A shared understanding of the digitalisation policy and cooperation in implementation should be the goal.
- Recognise the importance of leadership at the institutional level in managing and implementing these processes. Make sure the leadership of the institution is all-in and pro-actively supports and promotes the policy plans.
- Work together with other HEIs to develop self-assessment tools for digital readiness for HEIs. Similar to the SELFIE-tool[2] that is being used in compulsory education, these tools can support institutions in devising policy plans regarding digitalisation. There are already frameworks that can be used or adjusted if necessary, such as the European Maturity model for Blended Education[3].
- Use the opportunities digital technology offers for internationalisation: international profiling of HEIs, international cooperation and mobility of staff and students, attracting international students, etc.

For national/central governments:

- Make digitalisation in higher education a policy priority.
- Develop a vision and a related policy framework in consultation with the HEIs and various actors in higher education. Align this vision with EU policies.
- Consider coordinated actions (see also recommendation 15) and cooperation with HEIs.

---

[1] Digital Education Action Plan (2021-2027), https://education.ec.europa.eu/focus-topics/digital-education/action-plan.
European Education Area framework, https://education.ec.europa.eu/about-eea/strategic-framework.
2030 Digital Compass, https://futurium.ec.europa.eu/en/digital-compass.
[2] SELFIE, https://education.ec.europa.eu/selfie.
[3] European Maturity Model for Blended Education.

At European level:

- Develop a coherent vision on digitalisation in higher education at European level, taking the various levels and digital capabilities of European countries into account. The results of the current POWERHEAD project provide a firm impulse for this. Align this vision with all the existing European policy plans and frameworks.

Implement policy plans according to the principles of proper change management. This implies, among other things, focused communication and clear messages, empowering and supporting change agents within the institution, paying attention to resistance and the psychological acceptance of change.

2

For higher education institutions:

- Ensure effective and purposeful communication about changes to all involved parties. Create effective and quick feedback loops with students, educators and administrators.
- It is necessary to evaluate communication to remove possible barriers. In a digital environment, there may be an ambiguous perception of information that can create various risks in the absence of human contact. Thus, diversification of communication channels is essential.
- Support change agents within the institution. Aim for change agents among students and staff.
- Build further on existing successful projects or good practices, acknowledge these pioneers, support and valorise them in disseminating their work and inspiring colleagues and students.
- Recognize that digitalisation is transforming higher education at a very high pace. Digitalisation has a profound impact on the interaction between educators and students. Pay attention to possible resistance and to the psychological acceptance of change.

Embed digitalisation in regular quality assurance systems and use existing frameworks at institutional, national and European levels.

3

For higher education institutions:

- Guarantee the quality of teaching and learning processes in digital or blended environments. To this end, there are quite a few general frameworks for quality assurance (QA) that can also be applied to digital learning and teaching at institutional, national and European level (e.g. European Standards & Guidelines for Quality Assurance[4] and the ENQA Considerations for Quality Assurance of E-learning Provision[5]). Use new models developed specifically for quality assurance in digital or blended environments (such as the Maturity Model for Blended Education[6], the E-xcellence label[7], the Online Course Quality Indicators[8], etc.)
- Ensure that these frameworks are effectively used. Adjust them if necessary to the new reality of a more digital and blended higher education.

---

[4] http://www.ehea.info/page-standards-and-guidelines-for-quality-assurance
[5] https://www.enqa.eu/wp-content/uploads/Considerations-for-QA-of-e-learning-provision.pdf
[6] EMBED (eadtu.eu)
[7] About - E-xcellence label (eadtu.eu)
[8] infographic_quality indicators_2-0.pdf (wordpress.com)

- Ensure that digital/blended learning is a focal point in internal QA-monitoring. HEIs could include the digitalisation agenda in their quality assurance goals.

For national/central governments:

- Support institutions in the further development of their internal quality assurance in digital or blended environments.

- If existing frameworks need to be adjusted, regional/national governments should take the necessary actions to make them applicable to more digital and blended higher education. National QA-agencies could be involved in this process.

At European level:

- Support national governments and HEIs in the further development of quality assurance in higher education by considering if European frameworks are adequate for the new reality of more digital and blended higher education and where necessary provide pathways and adaptations.

2.2. Skills and digital readiness

Identify basic and advanced digital and self-regulating skills and competences that students need to obtain during their studies. Build further on the attainment goals of compulsory education and on the skills that incoming students already have acquired.

4

For higher education institutions:

- Identify which basic digital skills are required for all students regardless of their field of study. Frameworks such as The Digital Competence Framework[9] offer a solid basis in identifying relevant digital skills and competences.

- Next to that and complimentary with the skills mentioned, is the importance of self-regulation skills, especially for students entering their first year of studies. Self-regulated learning is often confused with independent study work, but they are not synonymous. It is important to note that sometimes educators have no clear understanding on how to develop this effectively pedagogically.

- Consider promoting computational thinking of students regardless of the field of study.

- Consider the fact that, at a later stage depending on their field of study, students may need specific digital skills at a more advanced level (data management, cybersecurity, digital numeracy skills, etc.).

- Consider the possibility for digital skills certification either in the form of micro-credentials or otherwise.

- Join forces with other HEIs and create skills modules and/or study courses (possibly micro-credentials) in a digital environment that combine current and globally relevant digital topics such as digital sustainability, promotion of green intelligence, active citizenship, etc.

---

[9] The Digital Competence Framework, https://joint-research-centre.ec.europa.eu/digcomp/digital-competence-framework_en.

Measure and monitor 'digital readiness' of new students. Improve and sharpen the digital literacy of students if necessary. Structurally embed the development of digital skills and self-regulation skills within the curriculum.

5

For higher education institutions:

- Measure and monitor 'digital readiness' of incoming students. Keep monitoring these skills throughout their academic career.

- Structurally embed the development of digital skills and self-regulation skills within the curriculum. The emphasis should be on the first-year and incoming students.

- Consider the fact that digital skills should go hand in hand with the development of social skills. Educators can combine tasks or group assignments with enhanced learning or practicing digital skills (especially digital communication and collaboration).

- Focus on the continuous professional development of educators, especially with respect to formative assessment. Formative assessment is a condition for enhancing students' self-regulation capability.

For national/central governments:

- Develop a policy framework on digital skills in higher education across the various HEIs, respecting their institutional autonomy.

- Take steps to combine forces across HEIs in supporting students on digital and self-regulation skills. It is important that institutions cooperate, and that the government provides support (see also recommendation 15).

Ensure support for the continuous professional development of educators. Develop a targeted, planned system for the specialized professionalisation of educators. Offer technical and didactic support and facilitate mutual exchange.

6

For higher education institutions:

- Educators and teaching staff need more (basic and advanced) digital skills to teach high quality blended and digital courses. The Digital Competences Framework for Educators[10] offers a solid starting point for institutions and their staff to get an overview on necessary (mainly pedagogical) skills and competences.

- Offer structural technical support to educators and teaching staff where necessary.

- Continue to support the continuous professional development of educators, which meets the various needs. Some educators primarily need technical professionalisation (such as setting up polls, using conferencing software, etc.)[11] , while others need specific didactic professionalisation.

---

[10] Digital Competences Framework for Educators, https://joint-research-centre.ec.europa.eu/digcompedu_en.

[11] The EU-DigComp 2.0 framework could help to screen educators for digital competences and suggest customised courses for an educator. For more information about the 'Digital Competence Framework 2.0', see https://ec.europa.eu/jrc/en/digcomp/digital-competence-framework.

[12] European Digital Education Hub, https://education.ec.europa.eu/focus-topics/digital-education/action-plan/action-14-european-digital-education-hub

- Organise knowledge sharing among educators, both between educators in the same team (subject-related) and between educators from various didactic teams, study programmes, departments, institutions, etc. This is possible via peer coaching groups and working groups, coaching by experts, cooperation in multidisciplinary design teams, micro-support/support by agents in the field, education days in institutions and at an association level, online communities, support via help desks, etc.

For national/central governments:

- Bring existing professionalisation and exchange initiatives together and expand them. Optionally, a collaboration platform can be created (see also recommendation 15).

At European level:

- Use digital technology to enable international professionalisation, via virtual, blended or physical staff mobility, etc. This is possible within existing alliances or via other partnerships between higher education institutions.
- Further support professionalisation of educators via various frameworks such as the Digital Competences Framework for Educators, by making available and exchanging digital credentials, by exchanging open educational resources, etc.
- Bring existing professionalisation and exchange initiatives together and extend them further. The European Digital Education Hub of the European Commission[12], which will be launched in the near future, will provide possibilities for this.

7 Ensure that there are sufficient educators and support staff with a profile that allows for further enhancement of the implementation of digitalisation in higher education. Valorise the effort and time educators invest in digitalisation.

For higher education institutions:

- Monitor the mental well-being of staff, because the further roll-out of digitalisation can involve an extra workload.
- Guarantee that educators get support, time and recognition for the efforts they put into digitalisation. Good employment conditions, such as an ergonomic work environment, are indispensable in this respect.

For national governments:

- Guarantee that sufficient resources are available to employ staff with a suitable profile to support the long term to (further) implement digitalisation in higher education (see also recommendation 13).

---

[12] European Digital Education Hub,
https://education.ec.europa.eu/focus-topics/digital-education/action-plan_action-14-european-digital-education-hub

2.3. Students

Stimulate communication, commitment and participation of students in policy making on digital or blended education.

8

For higher education institutions:

- Ensure there is clear communication about the 'rules' of the digital or blended processes (e.g. about the expected time investment, the time period in which a student can expect an educator's reaction to an e-mail). This information also includes the time that students are expected to spend on campus, the availability of infrastructure on campus etc., so that students can organise themselves accordingly.

- Make sure that students are not merely kept up to date with policy decisions on digitalisation, but involve them actively as change makers throughout the process of policy-making, from conceptualisation to setting up and evaluating digital learning activities. This is possible at an institutional level, within study programmes, as well as in the context of an individual course.

Pay attention to students' mental well-being, in particular in periods when there is intensive digital education and the social cohesion and social contact are under pressure.

9

For higher education institutions:

- Support students where necessary regarding their mental health. This can be done in different ways: facilitate study buddies as contacts to talk, set up courses for employees of the student support service concerning mental well-being, facilitate activities organised by the student council, support one-on-one contacts of educators with students, etc. The student population is diverse; therefore, initiatives for supporting students' well-being need to be diverse as well.

For national governments:

- Embed policy initiatives related to digital well-being into the existing policy framework of students' well-being. Also within this policy framework, the autonomy of the institutions needs to be taken into consideration (see also recommendation 1).

- Take steps to combine forces across HEIs in supporting students' mental well-being. It is important that institutions cooperate, and that the government provides support (see also recommendation 15).

A policy practice: Moodspace

MoodSpace is an initiative by the Support Centre Inclusive Higher Education (SIHO) in Flanders, in close collaboration with students, academic experts and Flemish higher education institutions, on behalf of the Flemish Minister of Education. It brings together the various initiatives for and by students and the opportunities offered by the institutions regarding students' mental health. MoodSpace wants to become a catalyst for making mental health a more open topic for discussion and for exchanging experiences. See moodspace.be.

Implement an accessible, flexible and adaptive digital and/or blended offer for the diverse student influx in higher education: working students with a part-time job in higher education, students with a disability, students with a low socio-economic status, etc. Consider and use inclusion as a driver for digitalisation.

10

For higher education institutions:

- Design an accessible, flexible offer that can be tailored to the student's profile (e.g. different durations of study programmes, levels of digitalisation, methods/approaches, tracks) in cooperation with actors from the labour market and the professional field, with a minimum of administrative obstacles (such as course prerequisites). This should be based on the principle of Universal Design for Learning[13] and requires professionalisation of staff (see also recommendation 6).

- Use inclusion as a driver for digitalisation and innovation in HEIs.

- Enhance lifelong learning through digitalisation, either via micro-credentials or other forms.

- Work together with other (European) HEIs to develop digital courses and consider curriculum networking. This empowers students that are not able to travel to other countries to attend higher education abroad and gain international experience. Virtual mobility can be a part of the internationalization strategy of HEIs and countries.

- Ensure open access to digital resources.

- Provide technical support for students who need it. This can be done via a direct point of contact for students, videos or manuals, etc.

For local governments:

- Offer accessible study and (group) workplaces to students with a suitable digital infrastructure.

For national/central governments:

- Offer preconditions to achieve an inclusive digital transition for a diverse group of students. This can be done in different ways:
  - Monitor and restrict the costs students personally have to pay for a study in higher education.
  - Provide resources to set up digitalisation-related projects (see also recommendations 13 and 14).

[13] The Guideline Universal Design: from policy to practice by SIHO provides a solid basis for HEIs to develop a broad and shared vision and approach towards universal design: Support Centre for Inclusive Higher Education (Steunpunt Inclusief Hoger Onderwijs, SIHO) (2022). Guideline Universal Design: from policy to practice.

2.4.   Course & Curriculum Design

Develop a well-considered course and curriculum design, based on pedagogical-didactical principles, in order to reach a more long-term redesign of education and curricula.

11

For higher education institutions:

- Aim for a balanced and coherent blended curriculum and course design, in which technology is used in a well-considered way as a means to achieve the students' learning objectives and learning outcomes of the study programme(s).

- Make sure the educational design is always based on pedagogical-didactical principles (e.g. with sufficient attention for interactivity). At the same time, use the possibility offered by technology to rethink and redesign the curriculum: more flexibility and modularity of curricula (e.g. via micro-credentials), more inter- and transdisciplinary curricula, etc.

- Find a balance between the autonomy of educators and didactic teams in making decisions on designing teaching and learning environments on the one hand and streamlining such decisions across didactic teams, study programmes etc. on the other hand (see also recommendation 1).

For national/central governments:

- Allow HEIs to share expertise and cooperate in course and curriculum design via a platform supported by the government (see also recommendation 15).

Ensure high-quality assessments and feedback in digital environments.

12

For higher education institutions:

- Ensure high-quality and diverse assessment and feedback in digital environments.

- On the one hand, respect the professional autonomy of educators and didactic teams. On the other hand, make agreements on this at the level of study programmes.

- Make sure that the various assessment methods (e.g., both summative and formative assessment that takes place online to a greater or lesser extent) are tailored to the educational approach and verify to what extent the students have achieved the learning objectives.

- Consider experimentation with automatic assessment and the use of artificial intelligence (AI) in assessments. This can be especially appropriate if there are large groups of students.

For national/central governments:

- Support institutions in further developing a (quality) framework regarding (e-)assessment. A collaboration platform can provide support (see also recommendation 15).

At European level:

- Support national governments and HEIs in implementing (e-)assessment in digital environments via further developing a (quality) framework and regulations at European level (for instance with respect to proctoring, learning analytics, etc.) (see also recommendation 18). National QA-agencies should be involved in this process.

2.5. Funding and Infrastructure

13

Guarantee continuous and adequate core funding of higher education in addition to sufficient resources that are allocated specifically for digitalisation and digital innovation in higher education.

For higher education institutions:

- Spend the resources in line with the institution's long-term vision on digitalisation.
- Pay attention to environmental sustainability when investing in digital infrastructure.

For national/central governments:

- Guarantee adequate core funding, so that the institutions can offer high-quality digital and blended education and can attract sufficient educators and teaching support staff. Prevent HEIs from having to use project-based resources for innovation in higher education to compensate for the lack of staff and basic infrastructure.
- Resources specifically destined for digitalisation in HEIs are welcome. Project-based funding has the potential to boost digitalisation because it can stimulate innovation . These innovation resources could also be managed by a collaboration platform, in accordance with examples from other countries (see recommendation 15). However, governments should make sure that once these (innovative) projects have ended, HEIs are able to structurally embed successful innovations.

14

Guarantee the availability and accessibility of (digital) infrastructure (basic equipment such as a computer, an Internet connection, a quiet place for studying).

For higher education institutions:

- Ensure that digital infrastructure is available for all actors in the HEIs. The availability of suitable infrastructure has a major impact on the quality of education.
- Make sure that the infrastructure in the broad sense of the word (architecture of buildings, digital learning platform (Learning Management System), student information system, etc.) is adjusted to the way in which education is set up. Here, the importance of social ties among students should be taken into account as well, particularly when digital or blended education is set up (see recommendation 8).
- The administrative processes should be maximally digitalised, but pay attention to the administrative burden. Educators often complain that digital infrastructure creates an additional burden because digitalisation does not always simplify administration. When choosing to roll out new digital tools, the administrative burden and workload of staff should be taken into account.

---

[14] Vlor, Higher Education Council. Advies over digital leren in het hoger onderwijs [Advice on digital learning in higher education], 13 May 2014

For national/central governments:

- Guarantee the availability of sufficient funding (including investment allowances), to enable institutions to make infrastructure available to all actors in higher education.
- Facilitate sharing and exchanging infrastructure between HEIs (see also recommendation 15) and with external partners, such as partners from the professional field and the labour market (see also recommendation 16).

2.6.   Cooperation and Stakeholders

Both higher education institutions and national governments have to take up their responsibility to strengthen and facilitate cooperation. Explore the possibility of establishing a platform in which HEIs cooperate in digitalisation of higher education with support from the government.

15

For higher education institutions:

- More exchange and the combination of forces regarding digitalisation in higher education are needed. Strengthen existing partnerships or create new partnerships if necessary. A change of mindset in the sharing of (digital) resources between institutions is important.
- Explore the possibility of establishing a platform in which HEIs cooperate in digitalisation of higher education with support from the government, in a similar way as forums such as SURF in the Netherlands, the National Forum for the Enhancement of Teaching and Learning in Higher Education in Ireland, and the Hochschulforum Digitalisierung in Germany.[15]
- Promote the wider use of open educational resources[16] in HEIs and lifelong learning.

For national/central governments:

- Create the preconditions (including structural funding) to support systematic cooperation and exchange between HEIs higher education institutions.
- Support and fund the creation of platforms as mentioned. Resource sharing needs to be promoted as a productive solution to the digitalisation of higher education.

At European level:

- Create the legal and financial preconditions to support cooperation and exchange between HEIs and national governments. This is possible within existing alliances and via other partnerships between HEIs higher education institutions.

A policy practice: SURF

SURF is a cooperative association of Dutch educational and research institutions. SURF offers a diverse range of IT research for education and research and encourages knowledge sharing through continuous innovation. Priorities of SURF are good and efficient collaboration with (international) relevant parties, ensuring the continued autonomy of the education sector at a time when big tech is gaining influence, the protection of education infrastructure, (research) data, and personal data against (cyber) threats and a quicker and more efficient response to digital developments. See surf.nl.

[15] Report of the PLA with presentations.pdf (vlor.be)
[16] SURF, Introduction to open educational resources, https://www.surf.nl/en/what-are-open-educational-resources.

16

Focus on cooperation with various relevant partners, such as players from the labour market.

For higher education institutions:

- Create a network with employers and representatives from the labour market, to develop blended or digital study programmes within the context of lifelong learning.
- Micro-credentials offer opportunities to meet labour market demand and create a flexible offer for lifelong learning in higher education.[17] When creating a durable cooperation between higher education and industry, it should also be clear what benefits there are for industry partners (e.g. traineeship possibilities).

For national/central governments:

- Create the preconditions (including structural funding) to support cooperation between HEIs and external partners (see recommendation 15).
- Facilitate a digital or blended offer of lifelong learning in higher education, by creating the conditions for providers (e.g. funding) and learners (e.g. enhancing the learning culture, providing various incentives that also apply to digital/blended courses and programmes, stimulating the recognition of Previously Acquired Competencies).[18]

17

Develop a balanced relationship with the EdTech sector. Cooperation is important, but higher education institutions cannot be fully dependent on their software and hardware providers. A certain level of independence is needed.

For higher education institutions:

- Combine forces between HEIs, in a way that the dependence on external software or hardware developers is restricted and the negotiating position of institutions towards the EdTech sector is strengthened (see also recommendation 15).

For national/central governments:

- Support and facilitate the cooperation between HEIs higher education institutions in relation to the EdTech sector. Align government policy with HEIs to enlarge the leverage towards the EdTech sector.

On European level:

- As part of the discussions about the Digital Education Action Plan, the European Education Technology sector has announced that they want to be a key driver in the European Digital Education System[19]. We recommend the European Commission to support HEIs in developing a well-balanced and equal relationship between HEIs and the EdTech sector. The Commission can contribute to the leverage institutions need to develop this relationship.

---

[17] Vlor, Higher Education Council. Micro-credentials in Europees perspectief: Advies voor de openbare raadpleging van de Europese Commissie 'Micro-credentials for lifelong learning and employability' [Micro-credentials in European perspective. Advice for the public consultation of the European Commission 'Micro-credentials for lifelong learning and employability]. 1 July 2021. See also: Commission Proposal for a Council Recommendation on Micro-credentials for lifelong learning and employability (2021)

[18] Vlor, Higher Education Council. Drempels wegwerken voor levenslang leren in het hoger onderwijs: advies voor het Vlaamse actieplan levenslang leren. 9 March 2021.

[19] European Education Technology community, Time for action: making EdTech a key driver in the European digital education ecosystem.

As a higher education sector, pay attention to various legal aspects linked to digitalisation: privacy, data security, copyright, intellectual property rights, etc.

18

For higher education institutions:

- Identify and combine the needs of institutions with respect to various legal aspects. Consult with actors from other HEIs and with the government to work on the details of an accompanying framework. A collaboration platform can be helpful (see also recommendation 15).

For national/central governments:

- Support HEIs by providing a framework and by clarifying regulations concerning these various legal aspects.

For national/central governments:

- Support HEIs by providing a framework and by clarifying regulations concerning these various legal aspects.

03

Recommendations per actor (abridged)

3.1.   For Higher Educations Institutions

3.1.1.   Vision, Policy and Quality Assurance

Develop a robust and solid long-term vision and strategy on digitalisation in higher education. Set goals in accordance with the vision and devise plans on how to reach those goals. Streamline the vision at various levels within the higher education institutions, at national level and at European level.

1

- Develop an evidence-informed vision and strategy on digitalisation.
- Set long-term goals for digitalisation and devise plans on how to reach those goals.
- Monitor the roll-out of the institution's vision and think about the role that data can play.
- Involve all actors within the institution in developing the policy, and streamline the vision at various levels at the institution.
- Recognise the importance of leadership at the institutional level in managing and implementing these processes.
- Work together with other HEIs to develop self-assessment tools for digital readiness for HEIs.

Implement policy plans according to the principles of effective change management.

2

- Ensure effective and purposeful communication about changes to all involved parties. Create effective and quick feedback loops with students, educators and administrators.
- Support change agents within the institution. Aim for change agents among students and teaching staff.
- Build further on existing successful projects or good practices, acknowledge these pioneers, support and valorise them in disseminating their work and inspiring colleagues and students.
- Pay attention to possible resistance and to the psychological acceptance of change.

Embed digitalisation in regular quality assurance systems and use existing frameworks at institutional, national and European levels.

3

- Guarantee the quality of teaching and learning processes in the digital or blended environment by embedding digital education in quality assurance processes.
- Ensure that these frameworks are effectively used. Adjust them if necessary to the new reality of a more digital and blended higher education.
- Ensure that digital/blended learning is a focal point in internal QA-monitoring.

3.1.2. Skills and Digital Readiness

4 Identify basic and advanced digital and self-regulating skills that students should master.

- Identify which basic digital skills are required for all students regardless of their field of study.
- At a later stage depending on their field of study, students may need specific digital skills at a more advanced level (data management, cybersecurity, digital numeracy skills, etc.).
- Consider the possibility for digital skills certification either in the form of micro-credentials or otherwise.
- Join forces with other HEIs and create skills modules and/or study courses (possibly micro-credentials) in a digital environment that combine current and globally relevant digital topics such as digital sustainability, promotion of green intelligence, active citizenship, etc.

5 Measure and monitor 'digital readiness' of incoming students. Improve and sharpen the digital literacy of students if necessary.

- Measure and monitor 'digital readiness' of incoming students. Keep monitoring these skills throughout their academic career.
- Structurally embed the development of digital skills and self-regulation skills within the curriculum. The emphasis should be on the first-year and incoming students.
- Digital skills shall go hand in hand with the development of social skills. Educators can combine tasks or group assignments with enhanced learning or practicing digital skills (especially digital communication and collaboration).

6 Ensure support for the continuous professional development of educators. Offer technical and didactic support and facilitate mutual exchange.

- Educators and teaching staff need more (basic and advanced) digital skills to teach high quality blended and digital courses.
- Offer structural technical support to educators and teaching staff where necessary.
- Continue to support the continuous professional development of educators, which meets the various needs.
- Organise knowledge sharing and exchange among educators, both between educators in the same team (subject-related) and between educators from various didactic teams, study programmes, departments, institutions, etc.

7 Ensure that there are sufficient educators and support staff with a profile that allows for further enhancement of the implementation of digitalisation in higher education. Valorise the effort and time educators invest in digitalisation.

- Monitor the mental well-being of staff, because the further roll-out of digitalisation can involve an extra workload.
- Guarantee that educators get support, time and recognition for the efforts they put into digitalisation.

3.1.3. Students

8

Stimulate communication, commitment and participation of students in policy making on digital or blended education.

- Ensure there is clear communication about the 'rules' of the digital or blended processes.
- Make sure that students are not merely kept up to date with policy decisions on digitalisation, but involve them actively as change makers throughout the process of policy-making and implementation.

9

Pay attention to students' mental well-being, in particular in periods when there is intensive digital education and the social cohesion and social contact are under pressure.

10

Implement an accessible, flexible and adaptive digital and/or blended offer for the diverse student influx in higher education.

- Design an accessible, flexible offer that can be tailored to the student's profile.
- Use inclusion as a driver for digitalisation and innovation in HEIs.
- Enhance lifelong learning through digitalisation, either via micro-credentials or other forms.
- Work together with other (European) HEIs to develop digital courses and consider curriculum networking. This empowers students that are not able to travel to other countries to attend higher education abroad and gain international experience. Virtual mobility can be a part of the internationalization strategy of HEIs and countries.

3.1.4. Course & Curriculum Design

11

Develop a well-considered course and curriculum design, based on pedagogical-didactical principles, in order to reach a more long-term redesign of education and curricula.

- Aim for a balanced and coherent blended curriculum and course design, in which technology is used in a well-considered way as a means to achieve the students' learning objectives.
- Make sure the educational design is always based on pedagogical-didactical principles; but at the same time, use the possibility offered by technology to rethink and redesign the curriculum.

12

Ensure high-quality assessments and feedback in digital environments.

- On the one hand, respect the professional autonomy of educators and didactic teams. On the other hand, make agreements on this at the level of study programmes.
- Make sure that the various assessment methods are tailored to the educational approach and verify to what extent the students have achieved the learning objectives.

3.1.5. Funding and Infrastructure

13 **Guarantee continuous and adequate core funding of higher education in addition to sufficient resources that are allocated specifically for digitalisation and digital innovation in higher education.**

- Spend the resources in line with the institution's long-term vision on digitalisation.
- Pay attention to ecological sustainability when investing in digital infrastructure.

14 **Guarantee the availability and accessibility of (digital) infrastructure (basic equipment such as a computer, an Internet connection, a quiet place for studying, etc.), to support primary and secondary processes.**

- Ensure that digital infrastructure is available for all actors in the HEI.
- Make sure that the infrastructure in the broad sense of the word (architecture of buildings, digital learning platform (Learning Management System), student information system, etc.) is adjusted to the way in which education is set up.
- The secondary processes should be maximally digitalised, but pay attention to administrative burden.

3.1.6. Cooperation and Stakeholders

15 **Both higher education institutions and national governments have to take up their responsibility to strengthen and facilitate cooperation. Explore the possibility of establishing a platform in which HEIs cooperate in digitalisation of higher education with support from the government.**

- Strengthen existing partnerships or create new partnerships. A change of mindset in the sharing of (digital) resources between institutions is important.
- Explore the possibility of establishing a platform in which HEIs cooperate in digitalisation of higher education with support from the government.

16 **Focus on cooperation with various relevant partners, such as players from the labour market.**

- Create a network with employers and representatives from the labour market, to develop blended or digital study programmes within the context of lifelong learning.
- Micro-credentials offer opportunities to meet labour market demand and create a flexible offer for lifelong learning in higher education[20].

---

[20] Vlor, Higher Education Council. Micro-credentials in Europees perspectief: Advies voor de openbare raadpleging van de Europese Commissie 'Micro-credentials for lifelong learning and employability' [Micro-credentials in European perspective. Advice for the public consultation of the European Commission 'Micro-credentials for lifelong learning and employability]. 1 July 2021. See also: Commission Proposal for a Council Recommendation on Micro-credentials for lifelong learning and employability (2021)

17 Develop a balanced relationship with the EdTech sector. Cooperation is important, but higher education institutions cannot be fully dependent on their software and hardware providers. A certain level of independence is needed.

- Combine forces between HEIs, in a way that the dependence on external software or hardware developers is restricted and the negotiating position of institutions towards the EdTech sector is strengthened (see also recommendation 15).

18 As a higher education sector, pay attention to various legal aspects linked to digitalisation: privacy, data security, copyright, intellectual property rights, etc.

3.2. Recommendations for national/central governments

3.2.1. Vision, Policy and Quality Assurance

1 Develop a robust and solid long-term vision and strategy on digitalisation in higher education. Streamline the vision at various levels within the higher education institutions, at regional, national and European level.

- Make digitalisation in higher education a policy priority.
- Develop a vision and a related policy framework in consultation with the HEIs and various actors in higher education.

2 Implement policy plans according to the principles of proper change management.

3 Embed digitalisation in regular quality assurance systems and use existing frameworks at institutional, national and European levels.

- Support institutions in the further development of their internal quality assurance in digital or blended environments.
- If the frameworks are to be adjusted (if necessary) national/central government should help the institutions by adjusting these institutional and national frameworks to the new reality of more digital and blended higher education. National QA-agencies should be involved in this process.

3.2.2. Skills and Digital Readiness

4 Identify basic and advanced digital skills that students should master. Develop a policy framework on digital skills in higher education across the various higher education institutions, respecting their institutional autonomy.

5 Measure and monitor 'digital readiness' of new students. Improve and sharpen the digital literacy of students if necessary. Structurally embed the development of digital skills and self-regulation skills within the curriculum.

6 Ensure support for the continuous professional development of educators and teaching staff, offer technical and didactic support and facilitate mutual exchange.

- Bring existing professionalisation and exchange initiatives together and expand them. A collaboration platform can be a possible option here.

7

Ensure that there are sufficient educators and support staff with a profile that allows for further enhancement of the implementation of digitalisation in higher education. Valorise the effort and time educators invest in digitalisation.

- Guarantee that sufficient resources are available to employ staff with a suitable profile to support the long term to (further) implement digitalisation in higher education (see also recommendation 13).

3.2.3. Students

8

Stimulate communication, commitment and participation of students in policy making on digital or blended education.

9

Pay attention to students' mental well-being, in particular in periods in which education is digital to a high extent, when the social cohesion and social contact are under pressure.

- Embed policy initiatives related to digital well-being into the existing policy framework of students' well-being. Also within this policy framework, the autonomy of the institutions needs to be taken into consideration (see also recommendation 1).
- Take steps to combine forces across HEIs in supporting students' mental well-being, etc. It is important that institutions cooperate, and that the government provides support (see also recommendation 15).

10

Implement an accessible, flexible and adaptive digital and/or blended offer for the diverse student influx in higher education.

- Offer preconditions to achieve an inclusive digital transition for a diverse group of students. This can be done in different ways:
  - Provide for a national framework to guarantee the educational quality via the institutional reviews.
  - Monitor and restrict the costs of a study in higher education;
  - Provide resources to set up digitalisation-related projects.

3.2.4. Course & Curriculum Design

11

Develop a well-considered course and curriculum design, based on pedagogical-didactical principles, in order to reach a more long-term redesign of education and curricula.

- Allow HEIs to share expertise and cooperate in course and curriculum design via a platform supported by the government (see also recommendation 15).

12 Ensure high-quality assessments and feedback in digital environments.

- Support institutions in further developing a (quality) framework regarding (e-)assessment. A collaboration platform can provide support (see also recommendation 15).

3.2.5. Funding and Infrastructure

13 Guarantee continuous and adequate core funding of higher education in addition to sufficient resources that are allocated specifically for digitalisation and digital innovation in higher education.

- Guarantee adequate core funding, so that the institutions can offer high-quality digital and blended education and can attract sufficient educators and teaching support staff. Prevent HEIs from having to use project-based resources for innovation in higher education to compensate for the lack of staff and basic infrastructure.
- Resources specifically destined for digitalisation in HEIs are welcome. Project-based funding has the potential to boost digitalisation because it can stimulate innovation[21]. These innovation resources could also be managed by a collaboration platform, in accordance with examples from other countries. However, governments should make sure that once these (innovative) projects have ended, HEIs are able to structurally embed successful innovations.

14 Guarantee the availability and accessibility of (digital) infrastructure (basic equipment such as a computer, an Internet connection, a quiet place for studying, etc.).

- Guarantee the availability of sufficient budgets (including investment allowances), to enable institutions to make infrastructure available to all actors in higher education.
- Facilitate sharing and exchanging infrastructure between HEIs (see also recommendation 15) and with external partners, such as partners from the professional field and the labour market (see also recommendation 16).

3.2.6. Cooperation and Stakeholders

15 Both higher education institutions and national governments have to take up their responsibility to strengthen and facilitate cooperation. Explore the possibility of establishing a platform in which HEIs cooperate in digitalisation of higher education with support from the government.

- Create the preconditions (including structural funding) to support systematic cooperation and exchange between higher education institutions.
- Support and fund the creation of platforms as mentioned. Resource sharing needs to be promoted as a productive solution to the digitalisation of higher education.

---

[21] Vlor, Higher Education Council. Advies over digital leren in het hoger onderwijs [Advice on digital learning in higher education], 13 May 2014

16

Focus on cooperation with various relevant partners, such as players from the labour market.

- Create the preconditions (including structural funding) to support cooperation between HEIs and external partners.
- Facilitate a digital or blended offer of lifelong learning in higher education, by creating the conditions for providers (e.g. funding) and learners (e.g. enhancing the learning culture, providing various incentives that also apply to digital/blended courses and programmes, stimulating the recognition of Previously Acquired Competencies).

17

Develop a balanced relationship with the EdTech sector. Cooperation is important, but higher education institutions cannot be fully dependent on their software and hardware providers. A certain level of independence is needed.

- Support and facilitate the cooperation between HEIs in relation to the EdTech sector. Align government policy with HEIs to enlarge the leverage towards the EdTech sector.

18

As a higher education sector, pay attention to various legal aspects linked to digitalisation: privacy, data security, copyright, intellectual property rights, etc.

- Support HEIs by providing a framework and by clarifying regulations concerning these various legal aspects.

3.3. Recommendations for the European level

3.3.1. Vision, Policy and Quality Assurance

1 Develop a coherent vision on digitalisation in higher education at European level, taking the various levels and digital capabilities of European countries into account.

- Use the opportunities digital technology offers for internationalization.
- Support national governments and HEIs in the further development of quality assurance in higher education by considering if European frameworks are adequate for the new reality of more digital and blended higher education and where necessary provide pathways and adaptations

3.3.2. Skills and Digital Readiness

2 Ensure support for the continuous professional development of educators.

- Use digital technology to enable international professionalisation, via virtual, blended or physical staff mobility, etc. This is possible within existing alliances or via other partnerships between HEIs.
- Further support professionalisation of educators via various frameworks such as the Digital Competences Framework for Educators, by making available and exchanging digital credentials, by exchanging open educational resources, etc.
- Bring existing professionalisation and exchange initiatives together and extend them further. The European Digital Education Hub of the European Commission[23], which will be launched in the near future, will provide possibilities for this.

3.3.3. Course & Curriculum Design

3 Support national governments and higher education institutions in implementing (e-) assessment in digital environments via further developing a (quality) framework and regulations at European level (for instance with respect to proctoring, learning analytics, etc.).

3.3.4. Cooperation and Stakeholders

4 Both HEIs and national governments have to take up their responsibility to strengthen and facilitate cooperation. Explore the possibility of establishing a platform in which HEIs cooperate in digitalisation of higher education with support from the government.

- Create the legal and financial preconditions to support cooperation and exchange between HEIs and national governments. This is possible within existing alliances and via other partnerships between higher HEIs.

---

[23] European Digital Education Hub, https://education.ec.europa.eu/focus-topics/digital-education/action-plan/action-14-european-digital-education-hub

Develop a balanced relationship with the EdTech sector. Cooperation is important, but higher education institutions cannot be fully dependent on their software and hardware providers. A certain level of independence is needed.

5

- As part of the discussions about the Digital Education Action Plan, the European Education Technology sector has announced that they want to be a key driver in the European Digital Education System.[24] We recommend the European Commission to support HEIs in developing a well-balanced and equal relationship between HEIs and the EdTech sector. The Commission can contribute to the leverage institutions need to develop this relationship.

---

[24] European Education Technology community, Time for action: making EdTech a key driver in the European digital education ecosystem.

[25] Laurillard, D. (2015) Thinking about Blended Learning. A paper for the Thinkers in Residence programme. 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.

04

About POWERHEAD: towards common guidelines

The Erasmus+ KA3 project POWERHEAD (Empowering Higher Education in Adopting Digital Learning) aims to encourage and support digitalisation in higher education. The project is coordinated by the Flemish Department of Education and Training. The Flemish Education Council carries out the implementation of the Flemish segment. The Ministry of Education and Science of Latvia implements the Latvian segment of the project. Together, they work towards common outcomes.

- As a first step of the project, a [background paper](#) was drawn up with some existing insights concerning digitalisation in higher education.
- In the next step, the current needs of higher education concerning digitalisation were identified by means of focus groups with various stakeholders. The Laurillard model (2015) was used as a starting point for the specific details of the subject matter. This step was performed in Flanders and Latvia simultaneously. The input from the Flemish and Latvian focus groups were merged and common needs were identified. This resulted in a [common needs analysis](#).
- This was later supplemented with input from other European countries, via a [Peer Learning Activity (PLA)](#).
- Eventually, the above described process led to recommendations for (1) national policy on digital learning and for (2) a digitalisation strategy within higher education institutions (and possible other actors). In a first step, these recommendations were prepared in parallel in Flanders and Latvia.
- Afterwards, the Flemish and Latvian recommendations were combined, taking into account the input of the Transnational Steering Group of the project (made up of the project partners and experts). This final document presents the common recommendations that resulted from the full process.

Definitions

Digitalisation entails both teaching and learning and the organisation of higher education.

Digitally enhanced learning and teaching is 'any type of learning or teaching that is accompanied or supported by technology'.[26] We deliberately opt for a broad definition that includes informal learning as well as formal learning. The definition includes but is not limited to digital learning in an educational context. The definition includes different degrees and forms of digitalisation. Digitalisation can be minimal, as is the case in face-to-face classroom teaching supported by an interactive blackboard, or it can be very far-reaching. In between these extremes, of course, there is a whole continuum of digitalisation possibilities.[27]

Blended learning comprises the combination of face-to-face classroom teaching with digital teaching. This takes place both synchronously and asynchronously. In policy documents, it is put forward as 'the learning of the future', particularly in higher education.

Distance learning is education that entirely takes place at a distance, usually asynchronously.

Hybrid learning has various connotations. While some students receive face-to-face instruction, others participate remotely online at the same time. This takes place synchronously.

Digital readiness in education is 'technology-related knowledge, skills, and attitudes and competences for using digital technologies to meet educational aims and expectations in higher education.' [28]

Change agents are the individual or group that undertakes the task of initiating and managing change in an organization.[29]

Self-regulation describes the mental processes that allow individuals to focus attention, remember instructions and handle multiple tasks successfully. These skills allow the brain to filter out distractions, prioritise tasks and control impulses. The ability to regulate and manage reactions and impulses is essential for personal and professional success.[30]

Computational thinking (CT) is a shorthand for "thinking as a computer scientist", i.e. the ability to use the concepts of computer science to formulate and solve problems.[31]

A micro-credential is a proof of the learning outcomes that a learner has acquired following a short learning experience. These learning outcomes have been assessed against transparent standards. The proof is contained in a certified document that lists the name of the holder, the achieved learning outcomes, the assessment method, the awarding body and, where applicable, the qualifications framework level and the credits gained. Micro-credentials are owned by the learner, can be shared, are portable and may be combined into larger credentials or qualifications. They are underpinned by quality assurance following agreed standards.'[32]

[26] Gaebel, M., Zhang, T., Stoeber, H. & Morrisroe, A. (2021). Digitally enhanced learning and teaching in European higher education institutions. Geneva/Brussels: European University Association absl. p.7

[27] Puentedura, R. (2006). Transformation, Technology, and Education. http://hippasus.com/resources/tte/

[28] Hong, A. J., & Kim, H. J. (2018). College students' digital readiness for academic engagement (DRAE) scale: Scale development and validation. The Asia-Pacific Education Researcher, 27(4), 303–312. https://doi.org/10.1007/s40299-018-0387-0

[29] Fred C. Lunenburg, Managing Change: The Role of the Change Agent. International Journal Of Management, Business, And Administration, Volume 13, Number 1, 2010.

[30] OECD, Chapter 4. Results of the self-regulation assessments in the United States, Early learning and child-well begin in the United States, https://www.oecd-ilibrary.org/sites/7d577a9a-en/index.html?itemId=/content/component/7d577a9a-en. Diamond, A. (2013), "Executive functions", Annual Review of Psychology, Vol. 64/1, pp. 135-168, http://dx.doi.org/10.1146/annurev-psych-113011-143750. Eisenberg, N., T. Spinrad and N. Eggum (2010), "Emotion-related self-regulation and its relation to children's maladjustment", Annual Review of Clinical Psychology, Vol. 6, pp. 495-525. McClelland, M. et al. (2015), "Development and self-regulation", in Handbook of Child Psychology and Developmental Science, John Wiley & Sons, Inc., http://dx.doi.org/10.1002/9781118963418.childpsy114.

[31] The Computational Thinking Study, EU Science HUB. https://joint-research-centre.ec.europa.eu/computational-thinking-study_en.

[32] European Union (2020). Final Report: A European approach to micro-credentials. Output of the micro-credentials higher education consultation group. doi:10.2766/50302.

PowEr
hEad

Empowering Higher Education in
Adopting Digital Learning

VLOR : vlaamse
onderwijsraad

Flanders
is education & training

Ministry of Education and Science of the Republic of Latvia

www.vlor.be/powerhead