'Transforming higher education: how we teach in the digital age'

Key messages from the joint PLA in Malta, 18 January 2017

Working Groups on the Modernisation of Higher Education and Digital Skills and Competences
Setting

'Transforming Higher Education: how we teach in the digital age' was a Peer Learning Activity organised jointly between the ET2020 Working Groups on the Modernisation of Higher Education and Digital Skills and Competences. It brought together representatives of public authorities and higher education institutions (HEIs) from 19 countries\(^1\) as well as the ETUCE, EFEE and the European Distance and E-Learning Network EDEN.

Presentations and discussions were held on initiatives from Ireland, Belgium/FL, Croatia, Finland, Denmark, Germany, Norway, Poland and Serbia, as well the Erasmus+-funded projects D-TRANSFORM and EFFECT\(^2\).

Background

Digital technologies and online resources now permeate all areas of teaching and learning. They are changing HEIs and driving innovation in higher education pedagogy and teacher training.

Rapid technological development is transforming the way in which higher education is delivered and students participate. The diversification of the student population requires individualisation of learning, more flexible delivery and a greater focus on pedagogies that provide support for learners. Although more academic content is becoming available openly and freely, students will continue to require local support for learning, which underlines the importance of teachers’ pedagogical skills along with field-specific competence. Teaching staff will also need stronger frameworks for assessing students’ learning outcomes as well as the value of different technologies and how or when to use them.

While there are diverse strategies and policies developed by national authorities and institutions to enhance digitalisation in higher education, progress remains uneven across countries and institutions. Below we have captured some of the key findings and messages which emerged from the discussions.

Key Messages

**Comprehensive national policy frameworks are needed**

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\(^1\) Austria, Belgium (Flanders), Bulgaria, Croatia, Cyprus, Denmark, Estonia, Finland, France, Germany, Iceland, Italy, Latvia, Norway, Poland, Romania, Serbia, Slovakia and Slovenia

\(^2\) See Annex 1 for details.
Countries with clear objectives and priorities for the enhancement of teaching and learning in higher education tend to have more effective policy mixes that can address the challenges and opportunities of digitalisation. Successful strategies focus on the enhancement of student experience and learning outcomes rather than digitalisation per se.

An effective policy mix could include:

i. a comprehensive HE strategy embedding excellence in teaching and learning;
ii. funding and other support to institutions encouraging excellent teaching and learning and the quality of the student experience;
iii. a mechanism for an ongoing dialogue between government and institutions;
iv. skills development of teachers and/or institutional leaders;
v. a system of monitoring and evaluating progress.

Ireland, for instance, has developed a National Strategy for Higher Education to 2030\(^3\), which includes a system performance framework, as well as a National Forum for the Enhancement of Teaching and Learning in Higher Education\(^4\), which offers institutions funding incentives and builds evidence of transformational approaches to improving pedagogies. The Digital Capacity Roadmap\(^5\) guides progress and provides a framework against which the evaluation is conducted.

**Incentives and support mechanisms for institutions are vital**

As HEIs need to address many competing challenges and expectations, incentives and support mechanisms, such as funding, platforms and national agencies can accelerate the take up of digitalisation at the institutional level.

National authorities can incentivise autonomous higher education institutions to enhance the digitalisation of teaching and learning by using funding mechanisms, such as performance-based funding and/or additional innovation- or quality-oriented funds.

Competitive time-limited funds to institutions can give a substantial boost to support digitalisation in HEIs, as the examples of Germany’s Quality Pact for Teaching\(^6\) (Qualitätspakt Lehre) and the French Investment for the Future Programme\(^7\) (Programme investissement d’avenir - PIA) show. National competitive funding schemes often draw on EU funds, such as the structural and investment funds and Erasmus+.

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7. [http://www.gouvernement.fr/pia3-5236](http://www.gouvernement.fr/pia3-5236)
Authorities can also accelerate developments by investing in a platform, a dedicated agency and networks which target institutions and/or institutional leaders and staff. These can take the shape of portals for high quality digital learning materials, tools and assessment, such as the French FUN-MOOC platform⁸ and the PIX platform⁹, which is expected to support the validation of digital skills.

HEIs and their teaching staff require substantial learning technology and instructional design support to facilitate the move from traditional teaching to blended learning. While institutional support units help promote innovation and change in teaching, they often face challenges in scaling up support for all teaching.

Country evidence shows that dedicated national agencies can further drive change. For instance, the Norwegian Agency for Digital Learning in Higher Education supports the development of educational practices through digital technology, monitors the progress of digitalisation in higher education and maintains DelRett.no¹⁰, a free online advisory service on copyright issues for HE practitioners. Pioneering departments at the institutional level can also offer services for academia and HEIs at the national level as the example of the University of Zagreb’s Computing Centre (SRCE)¹¹ shows.

**Dialogue between government and HEIs can ensure that the demands of digitalisation can be addressed**

To keep pace with the challenges and opportunities of rapidly evolving digitalisation, an ongoing dialogue between government and HEIs is necessary. A practical step for authorities to encourage HEIs to take a strategic approach to digitalisation is to sponsor a national forum for ongoing dialogue between government, HEIs and stakeholders.

Different approaches are being implemented in Member States. In Germany, the Forum for Higher Education in the Digital Age (Hochschulforum Digitalisierung)¹², initiated by the higher education sector, promotes the development of mutual understanding of, and response to, the diverse impacts of digitalisation on institutions, with teaching and learning as one of the focus areas, while Ireland’s National Forum for the Enhancement of Teaching and Learning in Higher Education¹³ drives sector-based initiatives to support high quality teaching and learning including digitalisation.

Pragmatic inter-institutional collaboration can also be supported by authorities to improve resource sharing, scale-up isolated or institution-specific good practice examples etc. and pursue a broad range of policy goals. Finland presented an

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⁸ [https://www.fun-mooc.fr/](https://www.fun-mooc.fr/)
⁹ [https://pix.beta.gouv.fr](https://pix.beta.gouv.fr)
¹⁰ [http://delrett.no/](http://delrett.no/)
¹² [https://www.hochschulforumdigitalisierung.de/](https://www.hochschulforumdigitalisierung.de/)
¹³ [http://www.teachingandlearning.ie/](http://www.teachingandlearning.ie/)
example where three universities of applied sciences have joined forces to create an eCampus\textsuperscript{14}.

**Developing skills of teachers and institutional leaders is crucial**

In order to drive and manage digitalisation of higher education, teachers need to develop their skills. This means that \textbf{initial and in-service training of HE staff should include innovation in pedagogy and the use of technology}. Teaching staff needs skills in both digital pedagogy and discipline specific digital competences. Authorities and institutions should prioritise flexible approaches that allow context- and discipline specific responses rather than one-size-fits-all solutions.

National authorities can support this goal with regulation and funding incentives. They can, for example, require a share of the budget to be dedicated to teachers’ further education, support professional training programmes which embed innovative teaching and the use of technology, or support academic leadership in change management. They can contribute to the development of digital competence frameworks for teachers, and ensure that all staff have access to support, space and time to acquire, develop and use their digital skills. EU-level support can further facilitate open professional collaboration. The projects of the European Distance and E-learning Network EDEN (e.g. D-TRANSFORM\textsuperscript{15}) work to establish a mutual support system to meet the challenges of transformation in teaching.

**University leaders’ focus on staff and institutional development is essential to ensure sustainable and scalable results.** National authorities can support “leadership academies” for institutional leaders that develop the ability to manage change and make appropriate decisions about resource allocation and risk management in the context of digitalisation. They can also provide a forum for the professional development of both institutional leaders and national authorities. Cross-country collaboration in this domain is useful as the experience of the EDEN’s project shows.

**A competence framework for digital skills of teachers** can be helpful, particularly when it is integrated into national professional frameworks of HE teachers. Notable country initiatives include Serbia’s Digital Competence Framework - Digital Age Teacher, and the Irish All Aboard\textsuperscript{16}, initiative which has developed a practical tool to map and build the digital skills of students and teachers. Adopting the \textbf{European Framework for Digitally-Competent Education Organisations} can help institutions to overcome the limitations of individual competence frameworks: over-reliance on individual teachers, resulting in uneven student experience.

\textsuperscript{14} \url{http://www.fuas.fi/en/fuas/Sivut/default.aspx}
\textsuperscript{15} \url{http://www.eden-online.org/eden_project/digital-resources-as-a-new-strategical-factor-for-a-renovation-of-modernization-in-higher-education-d-transform/}
\textsuperscript{16} \url{http://allaboardhe.org}
Acknowledging and rewarding quality teaching remains a challenge in many higher education systems and institutions. This calls for reforms in workload and time allocation, reward systems and formal acknowledgment of excellence and innovation in teaching. Institutions that wish to make progress in this domain could consider providing a teaching track for appointments, promotion and tenure to reward innovative teaching. Soft measures such as annual e-learning Awards can also be used to recognise excellence in teaching innovation, as the example from the University of Zagreb shows.

Monitoring and evaluating progress require more attention

Progress needs to be made in monitoring the impact of digitalisation on student experience or learning outcomes. National authorities could embed this aspect in national student surveys and encourage a uniform approach to HEI-level data collection and reporting, including indicators. In collaboration with HEIs they could monitor progress in digital teaching and learning and the impact on student experience and learning outcomes, including cases where digital learning is offered by third party providers, and sponsor research on transformative digital teaching and learning. A combination of EU, national and institutional surveys and projects can inform policy development at both national and institutional levels.

Further action at EU level

Some of the barriers that hamper the successful take-up of digitalisation in HEIs could be overcome by joint action at EU and national levels. The EU and national authorities should continue to encourage open educational resources and the use of Creative Commons licences that protect academics' intellectual property.

The European Commission contributes to strengthening evidence-based policies in countries and institutions by commissioning comparative research on issues related to digitalisation of higher education. This could cover, for example, a comparative analysis and research of national models of provision of technology-enhanced higher education services, which could help countries improve the organisation, management and cost-efficiency of such services.

The open method of coordination helps enhance peer learning, sharing of experience, networking and the involvement of governments, institutions and teachers. Further exchanges between policy makers would be valuable, particularly in the areas of assessing quality, pedagogical training and the changing role of the teacher due to innovations within and outside the higher educational institution.
Annex 1. Case Studies and Policies Presented in the PLA in Malta

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<thead>
<tr>
<th>COUNTRY, HEI ETC.</th>
<th>CASE STUDY / POLICY</th>
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<tbody>
<tr>
<td>BELGIUM/FL</td>
<td>HEI-specific approaches to blended learning were conveyed in video messages.</td>
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<td>CROATIA</td>
<td>The University of Zagreb’s E-learning Centre drives the e-learning implementation within the university and nationally. It supports teachers in the use of technologies and their implementation into educational process. Annually 70 000 participants take part in 5000 e-courses on the platform.</td>
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<td>DENMARK</td>
<td>Aarhus University’s programme for professors in law is aimed at developing blended learning in legal studies. It was supported by financial incentives to professors, exemption from the mandatory teacher training programme, access to technical support and a time allowance. This experience highlighted the need for flexible, discipline-specific approaches.</td>
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<td>FINLAND</td>
<td>FUAS, the Federation of Independent Universities of Applied Sciences (HAMK, Lahti, Laurea) have a joint eCampus which pool their e-learning offer to improve resource sharing and pursue the goal of timely completion in HE.</td>
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<td>GERMANY</td>
<td>The Forum for Higher Education in the Digital Age (Hochschulforum Digitalisierung), mainly funded by the Federal Government, promotes a dialogue between HEIs and stakeholders to develop a shared understanding of, and response to, the diverse impacts of digitalisation on HEIs.</td>
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<td>NORWAY</td>
<td>Norway is reforming its HE sector through enhanced focus on quality culture, which is expected to optimise the potential of digitalisation. Support systems include the Norwegian Agency for Digital Learning in higher education, which funds and monitors the progress of digitalisation and maintains DelRett.no, a free online advisory service on copyright issues.</td>
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<td>POLAND</td>
<td>Poland enhances the quality of teaching by strengthening HR and teachers’ skills. Pedagogical development is supported by competitive projects, such as Academic Creativity Centres, which transferred innovative pedagogies into schools with the help of teacher training students. New competitive projects will boost pedagogical, digital or language skills of 7000 staff. A MOOC Competition will develop MOOCs for Poland’s Open EDX platform.</td>
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<td>SERBIA</td>
<td>Serbia has developed a localised low-cost tool the “Digital Competence Framework - The Digital Age Teacher” that helps define teachers’ skills, goals and expected outcomes. Teachers at all levels can use it to review their skills and identify next steps for skills development. It is also useful for teacher training providers and policy makers.</td>
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<td>D-TRANSFORM</td>
<td>The European Distance and E-learning Network EDEN runs the Erasmus+ funded project D-TRANSFORM, which supports leadership development in e-learning for rectors and vice-rectors.</td>
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<td>EFFECT</td>
<td>EFFECT (European Forum for Enhanced Collaboration in Teaching) is an Erasmus+ project that is investigating the feasibility of a European Teaching Academy.</td>
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