

# **DIGITALLY ENHANCED BLENDED LEARNING:**

**LEVERAGING THE BENEFITS OF  
TECHNOLOGY IN HIGHER EDUCATION**

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## Co-chairs' Foreword

In the ever-evolving landscape of higher education, blended learning has become the sector standard. Students now expect, and universities are now delivering, courses that combine in-person and digitally enabled forms of teaching and assessment. The approach stands at the forefront of the digital revolution of education delivery, capable of meeting the diverse needs of learners by utilising technology for learning. Blended learning models offer the promise of a more personalised, engaging and flexible learning experience. Yet, to realise this potential, we need stakeholders – including Higher Education Institutions, government, students and technology developers – to work in concert to thoughtfully and effectively implement blended learning so that the opportunities it presents can be leveraged to greatest effect.

This report synthesises the findings from the Higher Education Commission's inquiry into the adoption and impact of blended learning across various institutions. Through case studies, recommendations, and examples of good practice, it provides a comprehensive overview of the current state of blended learning in higher education. Moreover, the report delves into the lived experiences of students and staff, offering valuable insights into the challenges and opportunities that blended learning presents.

In this spirit, the report calls upon senior leaders and academics in every institution to champion the cause of blended learning and associated teaching practice, making it a personal and institutional priority. Government can play an equally crucial role by facilitating a supportive ecosystem that enables our universities to effectively adopt and scale blended learning, as well as engage in innovative practice to drive progress in this area. As such, we urge government to address the financial, practical and operational challenges that institutions face, thereby helping to ensure that the UK HE sector is leading the technology transformation to enhance both student engagement and the student experience.

Finally, and perhaps most importantly, the report demonstrates the critical need to cultivate digital skills and capabilities. Educators, students and professional services staff must be equipped with the tools and knowledge necessary to navigate the technological currents that shape our world. This is not a luxury; it is a necessity for the workforce of tomorrow.

As we present this report, we are grateful to the wide range of individuals and organisations who have contributed their insights and expertise. We extend our heartfelt thanks to the students who have shared their experiences and the educators who have shown their resilience through pioneering new approaches to practice during a sector-wide transformation. We would also like to thank the expert panel of Higher Education Commissioners who have provided support and advice to this inquiry, as well as the Commission's sponsors Jisc and ACCA Global, without whom this inquiry would not have been possible.

We invite you to join us in this endeavour, to embrace the challenges and opportunities that blended learning presents, and to work collaboratively towards a future where every student is able to leverage the benefits of technology in higher education. Together, we have the opportunity to harness the transformative power of blended learning to create a more accessible, innovative, and engaging higher education system for all.



**Lord Philip Norton of Louth**  
Chair, Higher Education  
Commission

*Philip Norton*



**Professor Kathryn Mitchell CBE, DL**  
Co-chair, Higher Education  
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# Executive Summary & Recommendations

The integration of digitally enhanced blended learning in higher education is a strategic imperative to the evolving demands of the digital age. The Higher Education Commission's recommendations are focussed on elevating and evolving teaching practice and learning experience, exploring the various ways that Higher Education Institutions (HEIs) and government can enhance the system to realise the full potential of blended learning approaches. Where blended learning is deployed effectively, it can widen participation, enhance student outcomes and learning experiences, and modernise educational delivery to be responsive to industry changes and continued technological developments. Contributors to the inquiry voiced how student needs and demands are changing in line with the economy – more than ever, students are benefitting from flexible, personalised, and accessible delivery of their courses.

**Leadership** has been identified as a cornerstone for driving the strategic vision and operational excellence of digitally enhanced blended learning initiatives in curriculum, assessment, and assessment design. Effective leadership is not only about administrative oversight but also involves championing innovation, fostering a culture of continuous learning, and ensuring that curriculum design and assessment methodologies are responsive to the digital learning context. It requires a commitment to reimagining educational paradigms and embracing the potential of digital technologies to enrich the learning experience.

## 1. Importance of Leadership

**Recommendation 1: HEIs should appoint an executive leader in every department to advocate for and advance digitally enhanced blended learning models for student success. The team member would be accountable for:**

- a. Ensuring that all disciplines deliver courses that are consciously designed to embed digital skills and literacy in the curriculum.*
- b. Enabling innovation in assessment and feedback mechanisms to leverage digital tools and approaches.*
- c. Exploring ways of elevating student engagement through technology and facilitating the development of non-technical skills.*

**Staff support and digital capabilities** are equally critical to the successful adoption and integration of digital learning tools and methodologies. Institutions must prioritise the professional development of faculty and staff, equipping them with the necessary digital skills and pedagogical competencies to navigate and thrive in a blended learning environment. This involves not only technical training but also pedagogical innovation to effectively leverage digital tools in enhancing teaching and learning outcomes.

## 2. Staff Support and Digital Capabilities

**Recommendation 2: HEIs should support staff in further developing blended learning approaches, recognise good practice, and allocate time in workload models for digital training opportunities.**

**Digital inclusion and access to connectivity** address the foundational challenge of ensuring equitable access to digital learning resources. As higher education institutions embrace digitally enhanced blended learning, it is essential to address the digital divide by providing affordable and reliable access to technology and internet connectivity. This includes addressing cost-of-living considerations and ensuring that students from diverse socio-economic backgrounds can fully participate in and benefit from blended learning opportunities.

### 3. Equitable Access to Technology for Learning

**Recommendation 3: HEIs should address digital exclusion for all students, taking both a top-down and bottom-up approach to proactively provide and communicate relevant support. This approach could include:**

- a. Providing guidance on digital skills, devices and software to incoming students as part of the pre-arrival and induction process, as well as signposting where to get additional help and support upon arrival and throughout their academic journey.*
- b. Working alongside students' unions to provide information on digital inclusion initiatives that go beyond the technical support provided by IT services.*
- c. Working across the sector to achieve joined-up thinking and action, enabling solutions that are more strategic, sustainable, scalable, more effective, and more widely accessible.*

**Recommendation 4: Ofcom and HEIs should encourage broadband providers to expand existing connectivity schemes and offer discounted access to all HE students.**

**Recommendation 5: The Government should expand the eligibility requirements for maintenance loans to include learners studying remotely. Currently, they are only eligible if they have declared a disability.**

**Employability for a modern workforce** underscores the imperative to align educational offerings with the evolving needs of the labour market. Digitally enhanced blended learning presents an opportunity to develop digital literacy, critical thinking, and adaptive skills that all employers expect as a minimum for graduates. By integrating real-world applications and fostering industry partnerships, institutions can prepare students for successful careers in a rapidly changing economic landscape.

### 4. Employability for the Modern Workforce

**Recommendation 6: Professional, Statutory, and Regulatory Bodies (PSRBs) and other accreditation bodies should incorporate digital literacy standards into their evaluation criteria, reinforcing its importance as a fundamental outcome of higher education.**

**Recommendation 7: To bridge the gap between education and employment, HEIs should partner with employers to facilitate digital work-integrated learning experiences such as e-placements, digital internships, and project-based learning.**

**The use and procurement of educational technology (Edtech)** requires a strategic approach that balances innovation with cost-effectiveness and pedagogical value. Institutions must navigate the complex Edtech marketplace with a clear understanding of their educational objectives and the needs of their learners. This involves rigorous evaluation of Edtech solutions, stakeholder engagement, and the adoption of flexible procurement practices that can adapt to the fast-paced evolution of educational technologies.

## 5. Use and Procurement of Educational Technology

**Recommendation 8:** To encourage competition in the Edtech sector and maintain high-quality standards for emerging products and services, the HE sector should adopt the model of a vendor database of current and potential suppliers of Edtech and IT services to universities, with the support of trusted sector bodies (UCISA, Jisc, ALT, BESA etc.).

**Recommendation 9:** HEIs and UK Research and Innovation (UKRI) should prioritise project funding for the research and development of Edtech solutions and digital learning materials co-produced by academics, learning technologists, and developers.

**Recommendation 10:** The Competition and Markets Authority (CMA) should conduct a ‘market investigation’ into Edtech with the aim of improving licensing and contracting practices.

**Recommendation 11:** Crown Commercial Services (CCS) should coordinate with HEIs to tailor framework agreements and timelines to meet the sector’s needs, helping to reduce administrative burdens for providers looking to procure new Edtech.

**Regulation and quality assurance** of digitally enhanced blended learning is vital to maintaining educational standards and ensuring the integrity of the learning experience. As digital modalities continue to evolve, the sector should have a coherent and consistent strategy for assessing the quality of learning experiences. Any approaches to regulating and monitoring digital learning practice must be responsive and adaptable, promote ethical practice, safeguard student interests, and foster a culture of excellence and accountability among providers.

## 6. Regulation and Quality Assurance of Blended Learning

**Recommendation 12:** The Office for Students should establish a single, coherent approach for assessing the quality of online and blended learning as the designated quality body, ensuring that metrics do not impose additional bureaucratic burdens on the HE sector.

The inquiry’s research provides evidence of a widely varied system – institutions are diverse and at different points of digital maturity. The report raises questions about how institutional policies and priorities are developed to deliver blended education and provides case studies of good practices occurring across the sector. It set out to examine the current landscape of pedagogic practice, identifying fundamental components that must be in place to guarantee an adaptive and inclusive educational environment.




# Introduction

The Higher Education Commission began scoping its 10th inquiry in November 2022, following the publication of the Office for Students (OfS) Review of Blended Learning.<sup>1</sup> The nationwide lockdowns necessitated a swift and underprepared pivot to online delivery, and HEIs are adopting long-term strategies for advancing digital components of learning and teaching. The Commission found that HEIs have made notable progress since this ‘leap to online’: lessons have been reflected on to transform and reimagine blended practice and policy. This report examines how blended learning models have evolved to fully embrace the affordances of digital technology. The Commission set out to:

1. Identify the challenges that providers face in delivering blended learning courses.
2. Understand student and teaching staff’s blended learning experiences and explore opportunities to digitally enhance teaching and learning practice.
3. Propose suggestions on how government, policymakers and senior leaders in the higher education sector can support the further development of blended learning approaches.

The Commission found that blended learning has the transformative potential to widen participation and access to higher education for all, improve equality of opportunities, and enhance learning outcomes. As this teaching approach becomes standard practice, the sector is shifting the focus to refining and elevating current approaches to ensure that technology-enabled learning can fully realise its affordances. Accordingly, this report covers the importance of leadership, strategic investment in digital infrastructure, and equitable access to technology as key pillars of high-quality blended education.



# Terminology

‘Blended learning’ has been a contested term across the sector, with multiple interpretations of what exactly constitutes it and how it should be implemented. Contributors to the inquiry have used terms such as technology-enhanced learning, digitally enabled learning, and hybrid learning interchangeably. The simplified definition of blended learning as the combination of in-person learning with learning in a digital environment has now evolved to consider “more precise ways of talking about different elements and what they contribute to student learning and engagement”.<sup>2</sup> A more nuanced discussion of the different aspects of blended learning can help identify areas of opportunity to further advance practice underpinned by “sound pedagogic principles”, as Prof. Susan Orr states in the OfS review of Blended Learning.<sup>3</sup> We take this report to consider how HEIs may enact those principles and how the balance between digital and in-person components can be optimised to improve student outcomes and prepare them for their futures.

During the pandemic, the use of virtual learning environments (VLEs) and live video-based lectures/seminars became commonplace. A distinction arose as a result of this – whether an activity or encounter is synchronous (live, at the same or shared time) or asynchronous (at different times, usually within a time window). As methods continued to evolve due to nationwide lockdown restraints, further distinctions and nuanced definitions emerged over time. As Hrastinski notes, blended learning is an ‘umbrella term’ that requires further research to arrive at a sector-wide understanding – it is considered as a learning paradigm that involves more than one mode of teaching, multiple pedagogical approaches and use of diverse technologies.<sup>4</sup>

In Jisc’s report, “Beyond Blended”, a definition that considers the multiple components of blended learning is provided:

Time, pace and timing	Synchronous and Asynchronous
Space	Place and Platform
Materials	Tools, facilities, learning media and other resources (digital, print-based or material)
Groups	Roles and relationships (teacher-led and peer-learning, varieties of learning groups)

This definition breaks down the blended learning model into four distinct components.<sup>5</sup> Each aspect defines the learning activities in any given curriculum design. It allows for a more intentional consideration of how the different elements of blended learning can shape a student’s education journey. Further, detailing the requirements needed can scaffold discussions to explore how blended learning can be further enhanced and integrated with e-learning practices. In shaping the report, the sections address different aspects of the definition above, identifying opportunities and proposing solutions to advance the learning model.

It is important to note, however, that blended learning approaches are context-specific: good practice can differ per institution and even per department/faculty. Deploying blended learning practice should align with the strategic planning and institutional policy of the university, which takes commitment from leadership and collaboration between staff and students. The variation in approaches led to a lively debate about the quality of provision when using digital technology, as many contributors to the inquiry raised concerns about the role of Edtech and its growing role in delivering higher education. This is especially relevant due to the rapid evolution and growth of AI technologies. There are already research reports that an increasing number of students are using AI tools and other IT solutions to engage in coursework and complete assessments, demonstrating the prevalence of ‘digital’ in education today.<sup>6</sup> The sector is moving to a period where all learning will use and incorporate digital components to some degree. Technology can undoubtedly be a powerful tool in elevating education, but it requires considerable planning and consideration to realise its benefits.

# 1. Importance of leadership

## Section Overview:

This section examines the importance of senior leadership in delivering digitally enhanced blended learning. Several institutions have demonstrated that with clear policy and strong leadership, rapid digital transformation can occur. We heard from educators and staff that although the transition to online learning was difficult during the pandemic, a blended education can provide flexibility, increase accessibility, and enable the personalisation of learning. When digital tools are consciously embedded into programmes, students are able to engage in a digital community, fostering a sense of belonging with their peers without being on campus. These approaches can elevate the learning experience and incorporate digital competencies and non-technical skills (e.g. communication, critical thinking, etc.), which is increasingly valuable in preparing students for their futures. Based on these findings, the Commission recommends that HEIs strategically approach the scaling-up of blended learning across the institution by appointing an executive leader in every department to be responsible for driving forward blended models.

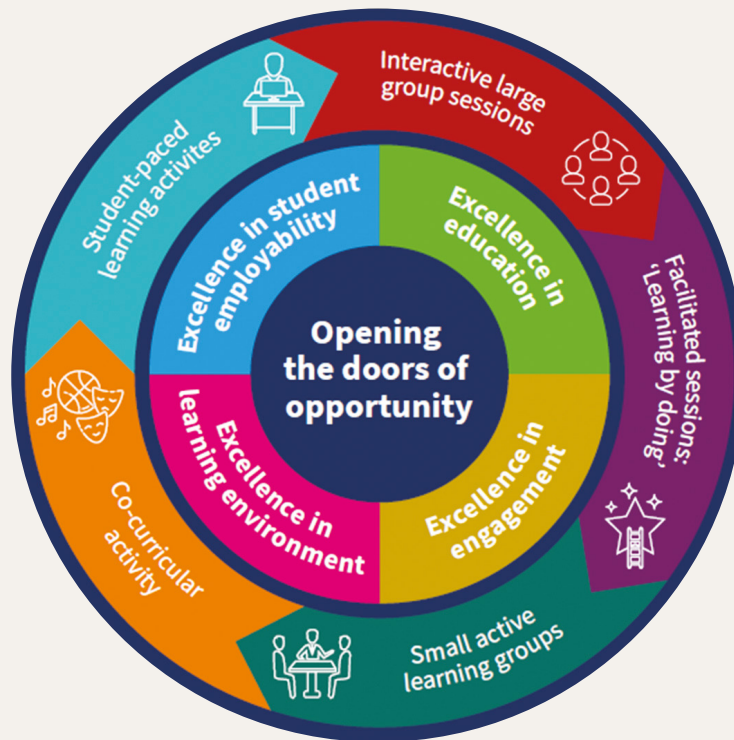
## 1.1 Strategic Oversight of Blended Learning Approaches

Effective leadership is critical to the success of blended learning. Various submissions state that implementing change and digitally transforming curricula, pedagogy, and assessment must happen centrally with strategic oversight. This is in line with much of the available literature on the topic, as researchers suggest that a more strategically led approach to policy, strategy, investment and operational planning is needed to achieve institutional adoption and realise the benefits of the teaching model.<sup>7</sup> When executive teams are committed to a coherent digital transformation strategy, consistency and coherency can be achieved during constant change.<sup>8</sup> Conversely, a lack of support for digitally enhanced blended learning models can hinder innovative practice and necessary reform. Senior leaders are positioned to consult and involve the student and staff community in driving change, which can be critical in advancing blended learning models. As Dr Ann Thanaraj, the Director of Digital Transformation at Teesside University, told us, any digital strategy should be “co-developed together with Edtech partners, staff, and students, with the learning experience ethos at the heart of driving change and enhancements”.<sup>9</sup>

Contributors to the inquiry represented a wide variety of disciplinary areas, and it was clear that blended learning approaches are shaped by how the subject has traditionally been taught. We found that blended learning approaches can be well-established in theoretical subjects as course materials can be easily translated into online domains. Subjects requiring practical work and more ‘in-person’ teaching often require consideration and quality assurance to ensure that digitally enhanced approaches to blended learning deliver desired student outcomes. However, recognising that digitally enhanced blended learning should exceed minimum standards and transform course materials to afford the benefits of technology-enabled learning, every department should appoint an executive leader to drive forward blended teaching and learning practice. This would ensure that blended learning approaches are developed meaningfully in alignment with subject areas.

## Case Study: Queen Mary University of London's ACE Approach

Queen Mary University of London (QMUL) created the Active Curriculum for Excellence (ACE) as a foundation for their approach to teaching. The ACE approach was co-developed with students and further developed by teaching staff and researchers. It is embedded in all programmes regardless of discipline. Components are routinely updated to reflect the context and environment in which students are learning. Four pillars of 'excellence in education and student experience' make up the foundation for this pedagogic approach: 1) education, 2) student engagement, 3) learning environment, and 4) student employability.



The success of this approach can be seen in QMUL's survey into students' perceptions of blended learning (or, in this case, the institution calls this mixed mode education). 65% of students rated their blended learning experience as 'good' or 'excellent' in 2022, a year after adopting this approach. 67.4% of respondents to the survey stated that blended learning should continue after travel and other pandemic-related restrictions are lifted, with flexibility, choice, and preference for online engagement as critical advantages to blended learning models. In an interview with Professor Anthony Michael (Dean of Education at QMUL), he attributes the high student satisfaction rates of blended learning to the strategic approach of pedagogy development: the ACE approach supports teaching staff to deliver an interactive and engaging learning experience. As the framework emerged post-pandemic in response to the great leap online, it is continuously being updated and reformed to continue driving the university's mission of excellent teaching.

## Recommendation 1:

**HEIs should appoint an executive leader in every department to advocate for and advance digitally enhanced blended learning models for student success.**

Several mechanisms support digitally enhanced blended learning models, such as curriculum and assessment design. The following section provides case studies showing how educators across the UK's higher education (HE) sector have approached blended learning and suggests how Recommendation 1 could be applied in practice.

- a. The executive leader would ensure that all disciplines deliver courses that are consciously designed to embed digital skills and literacy in the curriculum.

Through written submissions and evidence sessions, student contributors voiced that using online platforms can help cultivate necessary digital skills that can be used for the workplace. As students highly value workplace preparation and employability, it comes as no surprise that digital literacy is perceived as an essential outcome of higher education. For example, one student claimed that:

***One thing that worked really well for me was that I was able to use a lot of the same platforms and tools I use in class for work. It's been really nice using Padlet or Slack during my course – and then suddenly using the same platforms within my work environment. It really will help during the transition into employment that I have developed my digital capabilities during university.***

**Student, Evidence Session One**

Using technology in lectures and seminars gives students the opportunity to familiarise themselves with platforms and tools that may be used in the workplace. As shown in the case study for QMUL, executive leaders can shape pedagogical and technological frameworks that support the implementation of blended learning. They also play a role in investing in digital infrastructure and solutions that can aid students in further developing their capabilities and confidence in using technology. It is critical that this lead is able to align expectations with senior management on the use and application of digital components in blended learning courses to ensure that there is a cohesive and feasible strategy for scaling pedagogical change across the department.

## Case Study: Embedding Digital Capabilities in the Curriculum of a New Medical School – Kent and Medway Medical School

Kent and Medway Medical School (KMMS) is a partnership between the University of Kent and Canterbury Christ Church University. Established in September 2020, KMMS provides modern and comprehensive medical education and training to future doctors. KMMS integrates digital literacy and skills into its curriculum design for the Bachelor of Medicine and the Bachelor of Surgery (BM BS) programmes through one of its initiatives, “Digitally Enabled Doctor of the Future”.<sup>10</sup> This initiative supports students in becoming doctors who can work confidently in digital environments. It is supported by learning technologists, IT support teams, academic skills developers, and librarians, adopting a collaborative approach to identify digital competencies (informed by NHS England’s Digital Literacy Framework), map the curriculum to identify gaps in practice, and routinely track the progress of students using self-assessment questionnaires through progress-tracking tools Digital20 and Scholar20. These questionnaires allow course convenors to diagnose the digital competencies of the cohort at the start of the course and monitor scores over the years.

The mean score for the Digital20 assessments between Year 1 and Year 2 increased by 20%, attributed to the embedded approach to curriculum design – students can develop their digital capabilities and knowledge of digital health as part of the curriculum rather than an additional skill that they must develop over their degrees. This case study demonstrates the significance of embedding digital elements in the curriculum rather than providing supplementary workshops or training for students. Incorporating digital competencies into the curriculum communicates that students must develop their technical and non-technical skills and acquire knowledge of their subjects.

- b. The executive leader would enable the innovation of assessment and feedback mechanisms to leverage digital tools and solutions.

***Blended learning is feeding towards digital skills for the future. The only facet is about how to assess them – and that’s still a question mark for me. If we assess students by using the same traditional methods, then it’s not going to work. We need to change our assessment methodologies as well so that they can properly utilise the skills gained throughout their learning.***

Teaching Staff, Interview

Senior leaders are pivotal in enabling the innovation of assessment and feedback mechanisms, as any changes must comply with regulatory requirements and require oversight. Rethinking assessment design to leverage digital resources requires time and input from staff and an overarching strategy to implement changes on an institutional level.<sup>11</sup> Participants of the evidence sessions stated that despite the challenges the pandemic brought to the sector, it also provided an opportunity for educators to reconsider the value of traditional pen-and-paper exams and explore alternative ways of authentically assessing their students. There is a wealth of guidance available for educators that illustrate how technology can enable more inclusive and authentic assessment, such as Jisc’s principles of good assessment and feedback<sup>12</sup>, or Times Higher Education and Adobe’s joint report on authentic assessment and the role of digital creative technologies.<sup>13</sup>

### Case Study: Cadmus and the University of Manchester

Cadmus, an online assessment platform, partnered with the University of Manchester during COVID-19 to support the institution's transition to a blended learning and assessment strategy. This partnership focussed on assessment reform to protect academic integrity, increase accessibility, and enhance student success. Together, they transitioned 65 courses online across various disciplines as Cadmus' academic team redesigned and implemented applicable assessment templates to align with the university's teaching and learning policies. The platform also integrated the university's academic skills support and academic integrity resources to provide accessible support throughout the assessment process. Students received scaffolded assessment checklists, in-app academic skills support, referencing guides, and real-time educator feedback. This enabled students to understand their assessment requirements and develop authentic work. Conversely, the platform has benefited staff experiences by providing Academic Integrity Assurance Analytics. It helped teaching staff monitor how students constructed their assignments and identify students at risk of malpractice before submission. This practice effectively protects students who may lack awareness of what constitutes academic malpractice, thus supporting them in achieving successful outcomes.

Cadmus's platform can be accessed through Blackboard, and its interoperability is a key strength. All academic staff using Cadmus at the university reported wanting to continue using the platform after its pilot, with 97% giving a positive experience score. Similarly, 88.96% of the 6170 students who have used Cadmus reported a positive experience—a 17.6% increase in the student experience score since its implementation.<sup>14</sup>

c. **The executive member would explore ways of elevating student engagement through technology, facilitating the development of non-technical skills.**

Student submissions highlighted the importance of creating a sense of belonging within their communities in university and how many struggled during the pandemic due to decreased engagement with their peers and staff. Technology can improve student-centred learning and teaching practices, particularly in implementing blended learning models that cater to different learning preferences and needs. Using technology efficiently can also improve learning outcomes, self-regulation, and efficacy and lower attrition rates.<sup>15</sup> Moreover, it can help students develop non-technical skills while navigating digital platforms and tools, which are essential for success in various professional fields. These skills include collaboration, critical thinking, adaptability, and communication - skills employers consider increasingly important in the digital age. Educators can create an engaging learning environment that prepares students for the technology-dependent workforce by thoughtfully integrating technology into the curriculum and providing the necessary support.

## Case Study: Enhancing student engagement, employability, and digital experience - Dr Maria Limniou at the University of Liverpool

Dr Maria Limniou is in charge of leading a third-year cyberpsychology module at the University of Liverpool. The main objective of this module is to allow students to apply their disciplinary knowledge in various real-world contexts while developing their digital and communication skills. The course aims to teach students how to communicate their opinions effectively using different digital media and to encourage critical reflection on the learning process.

The module offers two types of assessments. The first is a traditional essay-based examination that evaluates the impact of digital technology on people's lives. The second assessment requires students to create a series of blog posts. The first post involves critiquing a research article, and the second post requires students to present themselves to their blog readers. In this post, they must reflect on their strengths, weaknesses, and knowledge and skills gained throughout the module. They are also encouraged to consider how this coursework may help them introduce themselves to a future employer and apply the skills they learned in workplace settings. Students are given multiple opportunities to foster a sense of belonging with their cohort. They are continuously encouraged to participate online and in person to seek peer feedback and collaborate. An example includes how Dr Limniou facilitates class discussions, which take place on Microsoft Teams and Padlet to support synchronous and asynchronous learning. Through these discussions, students can exchange ideas and resources with others and improve their communication and critical thinking skills.

In explaining her rationale for this course design, Dr Limniou stated that employability and digital skills are two key areas that should underpin 21st-century education. Dr Limniou invited members of staff from the university's careers offices to tailor advice and suggestions, used a wide variety of online platforms and Edtech tools, and designed coursework with the primary aim of incorporating employability into the curriculum and enhancing student engagement.



## 2. Staff support and digital capabilities

### Section Overview:

This section delves into the importance of upskilling teaching staff to improve their digital literacy, thereby enabling them to effectively design, implement, and enhance blended learning practices. In this section, we discuss what steps are necessary to ensure that teaching staff are supported in further developing their approaches to blended learning, providing access to resources that can help improve their digital capabilities.

The digital skills and capabilities of staff are also critical for delivering a quality blended learning experience. In the call for evidence, we asked HEIs to describe current initiatives to train and build confidence in staff. The responses from HEIs demonstrate great ambition to provide continuous professional development opportunities for staff. Examples of training provisions include the following:

- Open University provides training for staff through informal routes such as their “Badged Open Courses” accredited by the CPD Standards Office or through more formal routes such as their Masters in Online Teaching.<sup>16</sup>
- QMUL has a Technology Enhanced Learning team that supports staff in learning more about learning technologies used across the institution.<sup>17</sup>
- University of Derby organises staff development through its new Derby Excellence in Learning, Teaching and Assessment (DELTA) scheme, a suite of staff development events, and an ‘Ideas Factory’ for staff to share good practices and ideas.<sup>18</sup>

Similar initiatives or training hubs exist across the country – and although it is difficult to estimate how many courses and opportunities are available, all institutions will have a staff development scheme in place. However, Jisc’s 2022/23 survey of HE staff’s digital experiences reported that only 39% of respondents agreed that they were given guidance on the digital skills needed for their course.<sup>19</sup> This number has declined since 2020/21, although the figures are still higher than the pre-pandemic figure of 29%. Furthermore, only 16% felt that they had the opportunity to assess their capabilities and confidence, and only 8% received any reward or recognition for their digital skills.

The issue is not the number of training opportunities available but rather the barriers that discourage uptake. An interview with a staff member revealed that teaching staff are often at maximum capacity in workload, juggling their teaching, research, and administrative responsibilities and are not able to prioritise further career development. The University and College Union’s (UCU) workload survey further corroborates this claim, as it shows that the pace and intensity of workloads have only continued to increase since the pandemic. Critically, the survey report states that the “increase in workload is often at the cost of professional development”, emphasising capacity issues as an ongoing challenge.<sup>20</sup>

Good practices across the institution should be rewarded and recognised to encourage staff and create a supportive digital community of practice. Evidence session participants stated that training should be complemented by creating a culture of digital innovation and experimentation among staff to encourage further improvements to blended learning models. Appointing an individual responsible for digital engagement, access, and skills who acts as the focal point of staff support and facilitates peer-to-peer learning could be one way to foster a digital community of practice in an institution. Outside the institution, educators should continue to engage in sector forums and working groups to share insights on using digital technology, such as the Association of Learning Technology, UCISA, Jisc, AdvanceHE, etc. These groups prioritise confidentiality and data protection to encourage transparency and sharing of practice, allowing staff to interact with their peers and learn about new approaches.

Interviews with academics showed that there is an appetite for sharing evidence-based blended practice:

***“ We need more of a holistic or a strategic alignment towards technology-enhanced learning. For educators, achieving this professional development is incredibly important. As educators, we can encourage collaboration and sharing of good practices across our own and even with other institutions. We can do more to learn from each other. ”***

(NCUB)

Building upon existing schemes to support staff in enhancing their blended learning practice with digital tools, universities can encourage staff to improve their digital literacy by holding time to train in workload models. Senior leaders can especially target specific times in the year to prioritise digital training and update staff knowledge, such as when IT systems are newly implemented or when new academic staff are onboarding. Highlighting the importance of digital proficiency at a time when blended learning is standard practice can stimulate teaching staff to reflect on their practice and identify areas of improvement, which is vital to a successful blended learning experience for students.

***Resource: Digital capabilities framework for staff by Jisc***

Jisc has developed a national framework for digital capabilities and role profiles for university staff. This framework outlines the minimum digital skills required for each role. Universities can use this framework to identify gaps in digital literacy and anticipate any potential issues. The framework has been used to create role profiles that define the digital capabilities necessary for specific job roles. These profiles have been used to create reflective questions in the discovery tool, which aims to help students and staff identify their current strengths and areas for development in their digital capabilities. The role profiles have been developed in collaboration with professional bodies to maintain standards across different roles.

Jisc's written submission states that human resources are critical to the discussion on the digital capabilities of staff, which they believe are key actors that can support staff with their continuous professional development.

“ *[The national framework] needs to be the basis for all new JDs, staff induction, integrated into PG Certs – and into teacher training courses. Digital is no longer an optional add-on – it needs to be seen as being part of the professional skills all staff require.* ”

(NCUB)

To access the framework, visit <https://digitalcapability.jisc.ac.uk/what-is-digital-capability/>.

### **Recommendation 2:**

HEIs should support staff in further developing blended learning approaches, recognise good practice, and allocate time in workload models for digital training opportunities.

## 3. Digital inclusion, access to connectivity, and the cost of living

### Section Overview:

This section explores how digital exclusion and the ongoing cost-of-living crisis can hinder the adoption of blended learning practices. Digital exclusion can be further exacerbated by the increasing costs of maintenance and living, which has been shown to negatively impact students' mental and emotional well-being. With many students struggling to afford necessities and course materials due to unaffordability or lack of connectivity, digital exclusion can significantly impact financially vulnerable students who are not able to fully engage with the digital components of their courses. Widening access and participation in learning opportunities and creating an inclusive digital economy are national priorities for the UK, as driving towards inclusion means that everyone can access the skills required to participate in a digital society.<sup>21</sup> We found that in this cost-of-living crisis, more students are in need of financial support to afford to attend university – both physically and online. This section underscores the urgent need to address digital exclusion to ensure that all students, regardless of their socio-economic or ethnic backgrounds, have equal access to quality blended education and the confidence necessary to navigate the modern world.

### 3.1 Digital Poverty in Higher Education

In the UK, the OfS states that students are in digital poverty 'if they are without access to one of the core items of digital infrastructure'<sup>22</sup>, which are as follows:

- appropriate hardware.
- appropriate software.
- reliable access to the internet.
- technical support and repair when required.
- a trained teacher or instructor.
- an appropriate study space.

Digital poverty can affect access, engagement, and study outcomes in online education, preventing the development of transferable information and communications technology (ICT) skills and digital literacy. This, in turn, can affect learners' life outcomes beyond education and can become a barrier to engaging fully with blended courses. We found that students are still struggling to access appropriate online course materials or lack access to suitable devices needed for learning. In Jisc's Annual Digital Experience Insights survey of HE students, it was reported that students continued to struggle with accessing a suitable device (15% in 2020/21 to 27% in 2022/23), and many had poor wifi connection (63% in 2020/21 to 54% 2022/23).<sup>23</sup> There was also an increase in the number of students who encountered challenges with mobile data costs, as figures rose by approximately 41.67% between 2020 and 2023.<sup>24</sup>

The findings from the studies above were consistent with student accounts during the roundtable evidence sessions.



***Parity of access to digital tools needs to be ensured: students and staff cannot have digital capabilities if they are not able to access digital tools. Not all students have, for example, powerful machines at home or reliable high-speed internet connections. Many students are not able to afford these resources.***



Imperial College Union's former Deputy President (Education), Jason Zheng

Similar concerns were shared by students in the devolved nations, with the President of the National Union of Students (NUS) for Scotland emphasising the challenges spurred on by the cost-of-living crisis:



***The financial barriers that prevent students from accessing blended learning are really important to acknowledge... I was certainly in that situation when I was a student, where I would skip classes to take an extra shift at the supermarket I was working at. Because I had no choice, the only other option was to face homelessness.***



President of NUS Scotland, Ellie Gomersall

According to NUS Scotland's "Fighting for Students: The Cost of Survival" report, one in ten students have skipped an online class because they could not afford mobile data.<sup>25</sup> These figures demonstrate that basic levels of connectivity are still an issue for many students across the United Kingdom and need urgent attention.

### Case Study: Teesside University and Hardware/Software Support for Students

Teesside University offers iPads to students to help them become more digitally confident. Eligible students receive an Apple iPad with Microsoft Office 365 software installed, which allows them to access the technology that is consistent with their learning experience and environment. Academic and technical support is also provided to students to assist them in their learning journey. As part of this initiative, staff members are provided with a comprehensive digital development training and coaching programme to equip them with the necessary knowledge, tools, and skills to embrace new technologies and methods of interacting with them to deliver lessons. According to Teesside University, this initiative has wholly transformed the approach to learning and teaching for both staff and students.

It is critical to acknowledge that digital poverty and exclusion often intersect with other forms of marginalisation and disadvantage, leading to further inequalities among students. For instance, students belonging to Black/African/Caribbean and Indian/Pakistani/Bangladeshi backgrounds reported a lack of access to suitable devices more often than the overall survey data, citing issues with mobile data costs.<sup>26</sup> To ensure that universities can achieve their goal of increasing access and widening participation, it is necessary to target students who are at risk of disengagement or non-completion due to a lack of digital resources.

This issue of digital exclusion is especially more pronounced for non-mainstream students:



*I'd be inclined to emphasise "all" – my experience is that edge cases, such as foundation year students, part-time undergraduates, self-funded research students, tend to fall through the cracks.*



Professor of Information Technology and Committee (University of Bath),  
Member of BCS Digital Divide Specialist Group, James Davenport, written submission

Recognising the need for an institutional-wide approach to tackling the digital exclusion of students and staff members, the Commission recommends that HEIs provide support in various ways by coordinating between senior leaders, staff, students, and student unions.

### Recommendation 3:

HEIs should address digital exclusion for all students, taking both a top-down and bottom-up approach to proactively provide and communicate relevant support.

This recommendation could include approaches such as:

- a. Providing guidance on digital skills, devices and software to incoming students as part of the pre-arrival and induction process, as well as signposting where to get additional help and support upon arrival and throughout their academic journey.

The induction process is critical for setting the tone for a student's digital experience. Providing adequate digital support for students' academic journey is critical to ensuring they can effectively engage with their learning.



*Providers should assess students' digital capabilities and provide support or training sessions to develop these skills. This is important for bridging the digital divide that can disproportionately affect disadvantaged students and will only get more important as emerging technologies, like generative AI, permeate the curriculum.*



QAA, written submission

Providing information and guidance on digital skills and devices from the outset is essential. Initiatives could include:

- **Digital Skills Assessment:** Include a digital skills self-assessment in the induction process to identify students who may need additional support, such as Lancaster University's Digital Skills Self-Assessment tool.<sup>27</sup>
- **Induction Modules:** Create induction modules that cover essential digital skills, ensuring that all students start with a solid foundation, such as the University of Bristol's Digitally Ready pre-arrival course.<sup>28</sup>
- **Resource Directory:** Compile a comprehensive directory of digital resources, including free or discounted software, online tutorials, and local tech support services, such as University College London's e-Learning Wiki.<sup>29</sup>

- **Mentoring Programmes:** Pair incoming students with a digital mentor who can guide them through the initial stages of their digital learning journey, such as the University of South Wales's Super Mentor programme.<sup>30</sup>

**b. Working alongside students' unions to provide information on digital inclusion initiatives that go beyond the technical support provided by IT services.**

Students' unions play a pivotal role in representing the student body and are well-placed to identify and address issues of digital exclusion. By partnering with student unions, HE providers can ensure that support for digital skills and access to hardware is tailored to the actual needs of students. For example, Staffordshire University has created a new role responsible for engaging with students on their digital skills development, referred to as the student digital engagement officer. This individual is responsible for acting as a bridge between the university's teaching innovation and learning enhancement hub, library services, EDI initiatives, and the students' union to create work streams to enhance digital provision for students.<sup>31</sup> Student unions can work alongside executive teams to raise awareness of various initiatives within and outside campus to advocate for digital inclusion. They can advocate for students' needs and communicate them to the university's executive teams, supporting a diverse student body throughout their time at the university. This includes, for example, understanding and supporting students with additional support needs: universities must have the appropriate device, assistive technology and data connectivity for students with physical or cognitive constraints to ensure they are still able to participate digitally.

**c. Working across the sector to achieve joined-up thinking and action, enabling solutions that are more strategic, sustainable, scalable, more effective, and more widely accessible.**

HEIs should participate in the wider ecosystem to learn and solve common problems together. Digital inclusion is a multidimensional and complex issue intertwined with many other personal and social issues, such as financial poverty, deprivation, and social inequalities. It should not be treated as a separate issue or thought of as a problem to be solved by a single entity.

***There is still a lack of understanding and joined-up approach. Enabling someone to get digital and participate sufficiently in a digital world is more than just about having a device or connectivity. It requires joining many dots: device + connectivity + tech support + motivation & confidence + skills, opportunities, safety, inclusive design, etc.***

**Chair of BCS Digital Divide Specialist Group and Founder of #Joiningthedots, Freddie Quek, written submission**

There is a #JoiningtheDots movement across the UK by the tech sector and the Digital Poverty Alliance (DPA) to facilitate more joining up of thinking and action.<sup>32</sup> The DPA launched its National Delivery Plan and signed a Memorandum of Understanding with the BCS, Chartered Institute for IT to jointly tackle this issue. At Digital Universities Week 2023, an event that included representatives from the University of Leeds, Liverpool, Staffordshire, and Bristol, the BCS, DPA and THE started a call to action to create a sector-wide digital inclusion network and strategy, marking the HE sector as the first to do so. The co-chair of this network, Professor Nawaz of Staffordshire University, launched a Digital Inclusion Manifesto at his own university, which has been published by the THE Campus with the aim of encouraging other HEIs to follow suit.<sup>33</sup> We found that sector-wide collaboration and sharing of practice is a strength of the HE sector and believe joined-up approaches to tackle digital exclusion in universities is feasible and effective. As such, the Commission encourages HEIs to consider the scale and ubiquity of the digital divide as experienced by students and staff and urge leaders to enable sector-wide solutions to this ongoing challenge.

### 3.2 Broadband Connectivity

Recommendation 3 focussed on what providers can do to support students and staff at risk of digital exclusion. However, support must extend beyond campus parameters as studying off-campus becomes commonplace among students. As such, this recommendation focusses on the role of government in preventing our students from further exclusion as our society becomes increasingly digital. It is paramount that students can connect to the internet to access their learning, especially when most of the educational activities occur online and in virtual learning environments (VLEs).

It is concerning to note that mid-contract price increases above inflation are prevalent in the broadband industry. According to Which?'s 2023 broadband survey, most providers were raising mid-contract prices by approximately 14%, with BT and EE customers facing the highest average price hikes of £147.43 and £147.31 during a customer's contract. In an effort to combat digital poverty, broadband providers offer cheaper internet tariffs for Universal Credit and other benefit recipients, known as social tariffs. Despite this, the take-up of these tariffs remains low and has only increased marginally, indicating the need for improvement. As of April 2023, only 5.1% of eligible customers had signed up for the scheme, with awareness being a significant issue. Ofcom research shows that over half of eligible households remain unaware of the social tariffs, leading to low take-up rates.

Currently, there is discounted access for students in higher education. However, discounted rates for students are, on average, much higher than social tariffs and other internet schemes. Social tariffs range from £10 to £23 per month<sup>34</sup>, while broadband deals for students range from £21 to £42 per month.<sup>35</sup> As such, the Commission encourages broadband providers to expand current schemes to make HE students eligible for social tariffs or provide discounts in line with essential and basic broadband packages.



### Case Study: University of Witwatersrand, submitted by the Quality Assurance Agency (QAA)

This case study is specific to a university in South Africa, where the providers have negotiated with mobile communications providers to offer reduced rates for students. This shows there is precedent for reduced broadband fees for students in other contexts.

To provide support for remote learning during the global pandemic, the University of Witwatersrand entered contracts with the leading mobile network providers in South Africa to provide 30GB of data to all students registered with MTN, Vodacom, Cell C, or Telkom at no cost to students.<sup>36</sup> The mobile data scheme ran for approximately six weeks. Since then, a new contract has been negotiated with the mobile network providers on a bill-back basis for students and staff who do not have adequate access to Wi-Fi or data at home. The scheme also suggested ways of reducing data usage on third-party platforms to ensure that data can be reserved for online learning and educational purposes. This scheme is ongoing, with the initiative developing into monthly data offerings of 10GB (anytime) and 20GB (night-time) data in 2024.<sup>37</sup>

### Recommendation 4:

**Ofcom and HEIs should encourage broadband providers to expand existing connectivity schemes and offer discounted access to all HE students.**

## 3.3 Maintenance loans and support for learners

During the national lockdowns in 2020, the Department for Education launched the 'Get Help with Technology' programme to provide schools with access to devices and fibre connectivity. Unfortunately, this programme was not extended to HEIs, despite research showing that 63% of students still experienced poor Wi-Fi connection in 2020/21.<sup>38</sup> Further, the ongoing cost of living crisis continues to impact students' ability to access the digital components of their programmes. While the current system provides various forms of financial support, various contributors called for further maintenance allowance for HE students. These discussions often focussed on adjusting maintenance loan amounts to better reflect living costs and provide more targeted support for vulnerable student groups.

Increasing maintenance loans is a way to support digital inclusion initiatives, as it will enable students to have the financial means to access the necessary technology and internet services. Despite various efforts made by HEIs to bridge this gap, students still need help in this regard. According to the Institute for Fiscal Studies, errors in forecasting inflation from 2020 have led to the real-term erosion of student support.<sup>39</sup> The minimum parental income threshold has not been revised for over a decade, which has resulted in fewer students being entitled to the maximum yearly loan every year. Moreover, due to the ongoing cost of living crisis, students from low-income households have to face significant hardship as they graduate with the largest loan balances.

Some groups of students, such as distance learners, are entirely excluded from the maintenance loan system. The number of distance learners – defined as students who complete most, if not all, of their learning online – has steadily increased since the pandemic. According to the Higher Education Statistics Agency (HESA), UK-based distance learners increased from 190,755 students in 2014/15 to 278,420 students in 2020/21, with numbers projected to continue growing.<sup>40</sup> Students who are studying remotely are generally not eligible for maintenance loans to help with living costs, regardless of whether they are in full-time or part-time courses. There are exceptions for students who cannot attend their course in person due to a disability. However, students must provide proof of disability to demonstrate that they are unable to attend university in person – presenting a barrier for students who are unable to be on campus for various justifiable reasons yet without medical documentation.

The rise in remote delivery methods raises questions about the extent to which online provision qualifies as an online course. This is particularly relevant for students enrolled in full-time undergraduate programmes that are delivered primarily online, with non-mandatory seminar hours. The eligibility of such students for maintenance loans is a concern that needs to be addressed. During the inquiry, teaching staff discussed in-attendance courses with significantly higher proportions of online delivery than in-person teaching, comprising more than 60% of the course. Despite this, students in such courses are still eligible for maintenance loans. The current system assumes that distance learners do not require maintenance funding to cover necessities such as housing, homeware, kitchenware, and travel as they study from home. However, the inquiry has highlighted the growing ‘digital’ costs that students face due to blended learning becoming standard practice. This demonstrates that this assumption does not capture the reality of student experiences.

To widen access to blended learning courses, we strongly recommend expanding the eligibility requirements to include students who are learning remotely. This would ensure that distance learners are not differentiated from their peers and receive the same treatment and level of support from student finance bodies. It is certainly a meaningful starting point in providing desperately needed financial support for students who would benefit most from flexible, blended and online programmes.

### **Recommendation 5:**

**The Government should expand eligibility requirements for maintenance loans to include learners studying remotely. Currently, they are currently only eligible if they have declared a disability.**

## 4. Employability for the Modern Workforce

### Section Overview:

Integration of technology in learning environments has the transformative potential to cultivate skills highly valued in today's job market. By engaging with digital platforms and resources, students absorb subject-specific knowledge and become proficient with the tools and technologies in contemporary workplaces. This dual focus on content and technological fluency is essential for students to transition seamlessly into professional roles that increasingly demand digital competence. Our research found that because of emerging technologies such as Generative AI and automation, many professions are reviewing the qualifications process and considering whether they are fit for purpose in the digital age. Evidence session participants highlighted the importance of establishing guidelines for essential skills amidst the evolving technological landscape. We found that courses can be designed to embed the development of digital and information literacy skills into curricular teaching and work best when complemented by extra-curricular opportunities in work-based learning. Professional bodies can help HEIs in this regard by ensuring consistency in evaluating the digital skills needed to succeed in the workplace, which can reinforce digital literacy as a critical outcome of higher education. There was also significant support for HEIs to partner with employers in providing such opportunities, as participants recognised the value of aligning educational outcomes with the needs of the labour market and industries.

### 4.1 Employability in Higher Education

Employability has become an integral part of the HE system as institutions increasingly recognise their role in preparing students academically and for the workforce. This shift reflects a broader understanding of the value of HE in equipping students with a blend of academic knowledge and practical skills that improves their chances of securing employment post-graduation. The Government has also placed a greater focus on graduate outcomes due to the Higher Education Act (2017), which the OfS has primarily overseen to guarantee that a university-level education delivers successful outcomes for all students. These outcomes are recognised and valued by employers and enable further study, reflecting a broader strategy to align HE with the evolving needs of the modern workforce and digital economy.

The Government's higher education policy statement and reform consultation document further emphasise the prioritisation of graduate outcomes.<sup>41</sup> It outlines steps to ensure high-quality courses that lead to good outcomes, including regulatory reforms with the OfS to drive up quality and standards. Reforms include the introduction of numerical thresholds to set minimum expectations for the proportion of graduates who complete their courses and transition to further study or professional work. The document highlights the Government's investment in higher education to support courses that result in positive outcomes for students, the economy, and society. This includes funding for high-cost, high-return subjects, aiming to enhance graduate employability and meet the skills needs of employers and industry.<sup>42</sup>

Additionally, the OfS introduced the Quality and Standards Condition B3, which underpins both the Access and Participation plans and the Teaching Excellence Framework. The condition states that ‘the provider must deliver successful outcomes for all of its students, which are recognised and valued by employers and/or enable further study’, which delivers on its commitment to set numerical thresholds for graduate outcomes.<sup>43</sup> Now, more than ever before, HEIs are being held accountable for their graduates’ employment prospects and earnings.

## 4.2 Professional, statutory, and regulatory bodies (PSRBs)

Professional, Statutory and Regulatory Bodies (PSRBs) play a significant role in the HE sector by engaging with providers at various levels, including regulatory, representative, and promotional. They work with HEIs to ensure that educational programmes meet professional standards and prepare students to enter specific professions. PSRBs may accredit or endorse courses that meet professional standards, providing employer-recognised routes to professions. They can also participate in designing, approving, monitoring, and reviewing courses and contribute to the national system’s internal and external quality assurance processes. They critically help to maintain the required standards and comparability with the programmes across the sector, using their statutory and regulatory responsibility to set standards and promote consistency of standards and codes of practice. As such, PSRBs can play a pivotal role in ensuring that HE programmes meet the evolving demands of the professional world.

While explicit references to PSRBs and their establishment of digital literacy standards across all disciplines are limited, evidence from specific fields indicates a growing emphasis on digital competencies. There are instances of PSRBs working to integrate digital literacy into HE programmes through various means tailored to the specific needs and standards of the disciplines they oversee.

Examples include:

- **Law:** The QAA Subject Benchmark Statement for Law highlights lawyers’ evolving role in decision-making processes as artificial intelligence tools and software develop. This suggests that law programmes may explore emerging models for delivering legal services in a digital society, including the use of digital justice and ethical issues. This indicates a push towards incorporating digital skills and technology into legal education to prepare graduates for a digitally driven legal environment.
- **Accounting:** The Association of Chartered Certified Accountants (ACCA) works to embed digital literacy within the accounting discipline. They have introduced digital content and delivery enhancements to its ACCA Qualification to ensure that it evolves in line with technological advancements. Changes include direct learning through content that tests knowledge of financial systems, blockchain, data analytics, and the practical use of digital tools in computer-based exams (CBEs).<sup>44</sup> The updated qualification now requires students to develop digital skills in specific ways, ensuring that they are well-equipped to meet the digital demands of the finance function. The reforms made to the qualification were designed with input from employers, guaranteeing that students and members are thoroughly prepared to enter the workforce.

- **Healthcare:** The Nursing and Midwifery Council (NMC) in the UK mandates standards for nursing education, emphasising digital literacy as a crucial component. These standards apply to all NMC-approved programmes and include expectations for assessing students' digital and technological literacy at the selection and admissions stages.<sup>45</sup> The aim is to ensure students possess the necessary digital capabilities from the onset.<sup>46</sup> Digital proficiency is further highlighted as a critical outcome, with programmes encouraged to support the ongoing development of these skills to meet patient care needs. Proficiency standards for registered nurses detail the importance of digital skills in performing specific procedures and holistic patient care. Nurses are expected to demonstrate numeracy, literacy, and digital skills for safe and effective practice, including the responsible use of digital technologies for information sharing and data management.<sup>47</sup> This approach underscores digital literacy as essential for modern nursing. It extends beyond technical expertise to include communication and relationship management in a technologically advanced healthcare environment.

### Recommendation 6:

**Professional, Statutory, and Regulatory Bodies (PSRBs) and other accreditation bodies should incorporate digital literacy standards into their evaluation criteria, reinforcing its importance as a fundamental outcome of higher education.**

## 4.3 Digital Work-Integrated Learning Opportunities

HEIs increasingly recognise the value of digital work-integrated learning (WIL) experiences, such as e-placements, digital internships/apprenticeships, and project-based learning. These initiatives bridge the gap between academic learning and practical application and offer students a comprehensive education experience that mirrors the evolving digital workplace. Students can gain practical experience in their field, build professional networks, and develop the digital competencies that employers demand. It also allows students to apply their discipline-specific knowledge to solve real issues that they will encounter in their careers. By integrating digital WIL into blended learning curricula, HEIs can offer students a more engaging and relevant educational experience that prepares them for the realities of the modern workplace. Most importantly, digital WIL experiences can accommodate a diverse student body as they offer flexibility and accessibility, removing barriers to work experience such as geographical constraints, care responsibilities, or disabilities.

In the second evidence session, participants were asked to reflect on employability as a measure of student success and discuss initiatives that provided WIL online. We heard from employers that as the modern workforce becomes increasingly digital, they seek candidates who are not only knowledgeable in their field but also adept with digital tools and platforms. Digital WIL experiences are great opportunities to provide the digital literacy and professional skills essential in today's globalised and technologically driven job market.

### Case Study: Dr Lisa Taylor and Peer-Enhanced e-Placements at the University of East Anglia

Due to COVID-19 restrictions, in-person practice placements for occupational therapy students at the University of East Anglia were suspended in March 2020. As a solution, the academic team designed and implemented an online practice learning placement called Peer-Enhanced E-Placements (PEEPs). The first PEEP took place from April to May 2020, allowing students to progress through their programme without delay. The PEEP programme uses the virtual learning environment Blackboard to deliver the placements, which are organised following professional and statutory standards. The PEEP model provides groups of students with case studies, practical and reflective tasks, and activities with academics, clinicians, and service users, all delivered remotely, to meet the placement learning outcomes.<sup>48</sup>

Evaluations of the Peer Enhanced E-Placement (PEEP) have revealed significant and authentic learning outcomes, particularly in the context of peer group learning processes. The PEEP initiative has been instrumental in fostering employability that is highly sought after by employers, such as teamwork, interpersonal communication, active listening, problem-solving, and personal accountability. These attributes are critical for graduate employability, and the PEEP has effectively developed these skills, sometimes even surpassing traditional in-person placement experiences, through its emphasis on peer-to-peer learning. Having time to consider a wide range of case studies during the PEEP also provides students with a breadth of learning opportunities to draw upon to develop their employability and career planning. In our view, this type of activity could and should be expanded in a similar guide across disciplines.

### Case Study: Degree Apprenticeship for Digital and Technology Solutions Specialist at Warwick Manufacturing Group

The Digital and Technology Solutions Specialist degree apprenticeship, offered by Warwick Manufacturing Group (WMG), is a prime example of how industry partnerships can enhance educational programmes and foster innovation. WMG, an academic department at the University of Warwick, is a pioneer in bridging the gap between academia and industry, driving research and development to address technical and social challenges.<sup>49</sup>

The degree apprenticeship programme is structured to provide a blend of practical, theoretical, online, and work-based learning, ensuring that apprentices can apply their knowledge directly to the workplace.<sup>50</sup> This hands-on experience is invaluable for learners, as it allows them to develop a balance of leadership and technical abilities while implementing complex digital and technology strategies. Additionally, the funding model of apprenticeships underscores the mutual investment in developing a skilled workforce as costs are covered by the UK Government and employers. Employers play a crucial role in shaping the apprenticeship programme, not only by providing financial support but also by collaborating with educational institutions to tailor the programme to industry needs.

In summary, the Digital and Technology Solutions Specialist degree apprenticeship at WMG is a compelling case of how industry partnerships can enrich educational programmes. By aligning academic learning with industry expertise and needs, WMG ensures that apprentices are well-equipped to tackle current and future challenges in the technology sector.

#### Recommendation 7:

**To bridge the gap between education and employment, HEIs should partner with employers to facilitate digital work-integrated learning experiences such as e-placements, digital internships, and project-based learning.**

## 5. Use and procurement of Edtech

### Section Overview:

Blended learning approaches are centred around the latest developments in educational technology. These technological advancements have opened vast opportunities for blended learning to address the inadequacies of the traditional large lecture format that is commonly used in undergraduate higher education. In this report, Edtech is defined as technology that facilitates and enhances learning, teaching, and assessment, referring to the whole industry. This includes hardware such as laptops and tablets, as well as software and services like cloud-based learning management systems or virtual learning environments. Our evidence sessions showed that education providers are motivated and committed to using technology and data to improve operations, student experiences, and outcomes. However, implementing newly acquired technology and the tendering process can be resource-intensive and time-consuming. We recommend a more unified and consistent approach to procuring Edtech to leverage the collective voice and purchasing power of HEIs.

***Currently, in England, there is no universally agreed framework or standard that facilitates the evidenced-based judgement of what constitutes a high quality, effective Edtech product. In the absence of an evidence-based method to differentiate Edtech product quality, there is no clear guidance, grounded in pedagogical evidence, regarding desirable criteria or quality characteristics to look for when selecting Edtech products and tools.***

Department for Education, 2023

### 5.1 Challenges in Procuring Edtech

HEIs are solely responsible for the digital products and services they procure. As such, institutions independently gather information and monitor the impact of digital products and services. In a written contribution, Nous Group reported that 59% of universities have increased investments in digital infrastructure that supports student and academic life. In interviews with academic staff, many attributed the increased investment in Edtech solutions to technology's ability to enhance the quality and accessibility of course materials, improve operational efficiency, and ensure that universities remain competitive in the long term.

However, the complexity of the digital ecosystems of universities and the resources required to monitor and evaluate emerging technologies pose a barrier to the widespread adoption of digital tools. Contributors to the inquiry voiced that the tendering, procurement, and implementation of a new Edtech solution is hugely arduous, costly, and resource-intensive.<sup>51</sup> Preparing for and running tender exercises requires institutions (especially ones considered to be public sector organisations) to gather information, adhere to prescriptive regulations, and qualify vendors. HEIs manage such activities independently or through various channels such as purchasing consortia and sector organisations (e.g. Jisc, UCISA, etc.), which can impose further challenges as each HEI will differ in their digital maturity and capacity for Edtech adoption.



We found that HEIs work closely with purchasing consortia to procure Edtech, such as the UK Universities Purchasing Consortia (UKUPC). It is a favoured approach to procurement, as purchasing consortia can provide specialist knowledge relevant to the needs of the HE sector. The UKUPC delivers a broad portfolio of framework agreements for universities, effectively combining the purchasing power of multiple institutions. In an interview with colleagues at the Southern Universities Purchasing Consortia, one of the regional members of the UKUPC, we found that institutions are at various stages of digital maturity, leading to diverse approaches to tendering and implementation. However, all institutions face similar barriers to adopting new Edtech and IT solutions – the most pertinent being the cost of procurement exercises and the time needed to facilitate tendering and implementation.

## 5.2 Focus Group Findings

In collaboration with UCISA, a membership organisation for digital practitioners in the HE sector, the Commission convened two focus group sessions focussed on procuring Edtech for blended learning. The group identified several areas that would benefit from policy interventions to improve procurement practices across the sector.

1. Increasing Competition	The group found that there needs to be more of a concerted effort to increase competition and reduce monopolies held by some suppliers to ensure that HEIs can access the full suite of available Edtech solutions on the market. Monopolistic behaviour can also reduce innovation and exacerbate financial pressures for HEIs looking to change services. Members also noted that such issues can be further compounded by practical constraints such as the time required to complete procurement activities or the utilisation of university frameworks that apply to only a small pool of suppliers.
2. Multiple Routes to Market	The group spoke of the importance of enabling dynamic procurement and creating alternate routes to market. Dynamic routes can improve responsiveness from both the market and sector and increase access for HEIs to engage with a diverse range of suppliers, from small UK-based innovation companies and start-ups to internationally based Edtech vendors.
3. Aggregated / Joint Procurement Exercises	The group supported aggregated procurement as it can allow the HE sector to have a greater influence in the market and increase its buying power. Furthermore, joint procurement exercises can increase efficiency and drive up the value of the various consortia and purchasing groups, which benefits HEIs as they are able to obtain the best value for money.
4. Efficiency and Standardisation	The lack of standardised approaches or criteria is a barrier to the widespread adoption of emerging Edtech for buyers and suppliers. The group emphasised, however, that the community should drive standardisation by identifying best practices rather than introducing new policy mandates that could risk increasing administrative burden for HEIs – such as centralised information repositories or standardised functional requirements that are shaped by the sector.

5. Commercial Skills in the Digital Age	The group emphasised the importance of raising the profile of IT procurement across staff, as well as increasing awareness and skillsets needed to engage critically with digital tools. Conversely, members noted the importance of having commercial skillsets in IT leadership teams, which is considered best practice in industries but is not commonplace within the HE sector.
6. Interoperability	The group discussed interoperability as a critical function in enabling competition and diversity in the Edtech market. Members found that more could be done to ensure that suppliers providing services for the HE sector can be seamlessly integrated into other platforms. This would reduce the cost of change for institutions, increase leverage, and allow for faster deployment of new technology.
7. Standardised Non-functional Requirements	Non-functional requirements (NFRs) in relation to Edtech are specifications that describe the system's operational capabilities and constraints, which determine how well the Edtech system operates rather than what it does. The group found that the sector would benefit from a standardised set of NFRs to ensure critical aspects of the user experience (e.g. accessibility, cybersecurity, data privacy, etc.) are always considered when purchasing new Edtech tools.

### 5.3 Due Diligence on Edtech Tools and Early Market Engagement

The Commission received various submissions voicing concerns on due diligence and the equitable use of Edtech tools for education. Despite the grand scale of the Edtech industry and its extensive reach over the HE sector, for many Edtech products, “little is known about how they work, whom they benefit and whether they work successfully”.<sup>52</sup> The Department for Education has regularly published notes on the topic, although its scope does not extend beyond schools and colleges. Contributors to the inquiry supported a sectoral-level oversight of the Edtech market to ensure that the adoption and implementation of Edtech tools are considered in the context of critical social challenges such as digital inequity, transparency, and ethics. It is crucial for institutions to ask the right questions upfront: knowing the market is critical to anticipate risks and to make informed requests for proposals to suppliers.

The census that emerged from written submissions was to form a consistent and unified approach to the market so that the sector can leverage its collective voice and buying power as effectively as possible. Further, standardising requirements would encourage vendors to develop products relevant to UK pedagogic practice and increase efficiencies, as institutions would not have to qualify each vendor individually.<sup>53</sup> One method of facilitating sector-wide due diligence is to establish centralised information repositories on Edtech vendors that have been vetted and backed by academics, trusted sector bodies, and providers.

According to the OECD, establishing information platforms on Edtech providers and information and resources is a solution to bridge the information gaps between levels of governance.<sup>54</sup> A **vendor database** is such a platform, acting as a central repository that stores and manages information about suppliers or vendors. The database typically includes essential information such as contact details, financial data, performance history and contract terms. The purpose is to streamline procurement processes, enhance communication and collaboration between suppliers and organisations, and ensure compliance with corporate policies and industry regulations. It is an effective way of requiring suppliers to adhere to a professional level of rigour and standards or identifying suppliers that are compliant with requirements deemed as a priority for buyers. The case study below demonstrates the advantages of utilising a vendor database, especially for early market engagement exercises.

### Case Study: Achilles Utilities Vendor Database (UVDB)

Like Edtech, the utility market is fast-moving and subject to stringent regulations and constant technological advancements. Achilles, a company specialising in supply chain regulation and procurement, connects suppliers across sectors and geographies to create resilient and transparent supply chains. They offer a wide range of services to help buyers procure utilities, such as in-depth assessments and in-person audits, to ensure that suppliers and buyers are supported in making the best choice for their businesses.

Achilles hosts a platform called MyAchilles that helps buyers collect and validate information about a vendor and the products or services they supply. The Utilities Vendor Database (UVDB) is part of their offer, a prequalification service that helps utility companies manage risk, comply with regulations, and verify other critical financial and company information. Critically, the database is successful in achieving the following:

- **Faster Processes:** the vendor database can complete tendering exercises within ten days (excluding negotiations), as buyers already have access to supplier insights (e.g. IT systems integrity, cyber exposure). By comparison, a HEI will spend around 10-12 months to tender a VLE platform formally.<sup>55</sup>
- **Customised terms and conditions:** buyers can customise their terms and conditions and issue them through the Request for Information feature, a communication channel between the buyer and supplier. As HEIs have their own unique needs and wants for Edtech platforms, a feature like this could easily facilitate negotiations for terms and conditions on an institutional or sector-wide level. This feature could, for example, establish NFRs such as accessibility as a minimum requirement for suppliers.
- **Pre-qualification questionnaire created by the community:** the pre-qualification questionnaire is created by working groups comprised of stakeholders across the sector and is created and updated by the community.
- **Dynamic Purchasing:** the vendor database enables small-to-medium enterprises (SMEs) and start-ups to register in a matter of days, given that suppliers can pass the pre-qualification questionnaire. This enables a competitive market as it is easy to diversify the pool of suppliers.

We found that many of the large suppliers also used by the HE sector are registered in the vendor database (such as Microsoft and Cisco) and that creating a new category in their database specifically for Edtech vendors is feasible and worth exploring. Using the Achilles vendor database for Edtech can enable transformative changes to how HEIs procure IT software and products, simplifying and speeding up the procurement process. This can save administrative costs and help sector bodies procure Edtech solutions from vetted and trusted suppliers with track records of enhancing learning experiences and outcomes. Additionally, creating a new category in their existing database specifically for Edtech vendors is feasible and worth exploring.

Various contributions to the inquiry show that the sector wants a streamlined process that affords customisation and flexibility. We find that if a pre-qualification system is to be established, it is fundamental to build upon existing mechanisms and established channels for mediating procurement principles and ethics, which are often led by trusted sector bodies such as Jisc, UCISA and BESA (for schools and colleges). As such, a vendor database for Edtech led by the HE sector and relevant organisations is a practical, short-term solution for increasing efficiencies and competition whilst maintaining a level of professional standard. Furthermore, it would advance sector-wide thinking on what additional benchmarks – particularly relevant to safety and reliability issues – are required for technologies that are being deployed in an educational setting.

## Recommendation 8:

**To encourage competition in the Edtech sector and maintain high-quality standards for emerging products and services, the HE sector should adopt the model of a vendor database of current and potential suppliers of Edtech and IT services to universities, with the support of trusted sector bodies (UCISA, Jisc, ALT, BESA etc.).**

### *Resource: Accessibility Toolkit for Procurement and Contracting Templates*

The Royal National Institute of Blind People (RNIB) and University College London (UCL) are collaborating to improve the accessibility of the higher education experience. A key early output of the collaboration will be guidance on procurement and contract templates that provide robust requirements around accessibility compliance.

Creating guidelines (and an accessibility toolkit) for the procurement of products and services will ensure that institutions do not have to reinvent the wheel when going to market. By standardising accessibility requirements, the guidelines will reduce the ability of suppliers to embed inaccessible products within the higher education landscape. Consistency in procurement processes will also support greater business incentives for suppliers to deliver accessible by design products and services as higher education institutions will be better positioned to compare procurement feedback and outcomes.

If you would like to find out more or be part of the project please contact Ben Watson, Head of Digital Accessibility at UCL: [b-watson@ucl.ac.uk](mailto:b-watson@ucl.ac.uk), or visit the [Make Things Accessible](#) website.

## 5.4 Creating Edtech (Research & Development)

**“ Educational innovation needs to be driven by pedagogical deliberations rather than technical novelty or private sector financial gain. It is important to ensure that those pedagogical deliberations are based on robust scholarship and research into what works. Research and scholarship opportunities that encourage interdisciplinary collaboration between academics, technologists and researchers would be particularly welcome. ”**

*Advance HE, written submission*

Edtech products have the potential to alter the socio-structural order of the educational system as they increasingly play a role in decision-making processes at various levels, including administrative and pedagogical decisions. As previously mentioned, there is still room for clarification on Edtech’s functionality and the beneficiaries of these products: it is paramount that pedagogical interests drive the development of Edtech tools rather than commercial ones. In the evidence sessions on using Edtech, participants voiced their support for collaborations between learning technologists, academic specialists, and the participation of user communities the products intend to serve. As such, projects that leverage the pedagogic expertise of educators should be further prioritised in developing Edtech solutions for the HE sector.

The previous section emphasised the significance of interoperability, as discussed by the members of the focus group. It is crucial to foster collaborations between academia and industry to ensure that Edtech investment is aligned with industry needs and changes, which can lead to improved integration support. Jisc, in their written submission, emphasised the importance of data and technical interoperability as critical to a fast-developing and ever-changing market, which is as much about supporting integration and use as it is about supporting exit plans to move to new solutions.<sup>56</sup> Collaborations between academia and industry can help promote better integration, further supporting students and staff to use a diverse suite of digital tools that can enhance their learning experiences.

Existing initiatives that have supported the research and development of Edtech tools include the Knowledge Transfer Partnership (KTP) scheme. KTPs are funded by Innovate UK and are a partnership between UK-based businesses, registered knowledge bases (universities, colleges, catapults, and technology organisations), and a suitably qualified graduate with the capability to lead a strategic business project. KTPs are developed with the core goal of solving specific, strategic innovation challenges faced by a business. A recent pilot scheme under the KTP programme was designed to create short-term collaborations to “rapidly inject innovation capacity,” aptly named the Accelerated Knowledge Transfer to Innovate Pilot Scheme. One funded project was a partnership between York St John University and ViSR Dynamics Ltd, which explored the suitability of a self-author tool for augmented reality content within learning and assessment for educational purposes.<sup>57</sup> Most notably, the research is underpinned by exploring various methods of teaching and learning, as the project overview states that this Edtech solution is most effective when implemented within a constructivist pedagogy. This is an example of how collaborations between industry, academics and developers can create Edtech products and tools driven by pedagogical interests rather than commercial interests.

### Case Study: Durham University and 'Theatre in the Round' (Use of VR in English Studies)

Many of the simulation-based educational opportunities focus on disciplines with a high portion of practical components, such as medical education or engineering. However, a collaboration between technicians, subject specialists and learning designers at Durham University showed how convening expertise from multiple domains has modernised English studies, a traditionally theoretical and desk-based subject. A recent research project aimed to provide students with a unique learning experience by using virtual reality (VR) to explore scenes from the plays they were studying. Students performed scenes from three plays they studied for the module, selected from Hamlet, Top Girls, and Waiting for Godot. Performances were then recorded using a 360-degree camera. Later, students viewed these scenes using Oculus Quest headsets and then participated in a focus group to discuss their experiences and key takeaways.

The project is a collaboration between Dr Alistair Brown, a professor of digital humanities and modern literature, Dr Mark Childs, a senior learning designer, and James Youdale, a senior digital education consultant and technologist. The project objectives were to modernise a traditionally academic subject and use VR headsets to fully immerse students in the text and reflect on their readings. In an interview with Dr Childs and Dr Brown, we found that the project facilitated shared understanding between the course convenors, as the integration of VR technology was informed by pedagogical knowledge. For example, during post-performance focus groups, students were asked to discuss their experiences of using the technology and how it might have affected their interpretations of the text. Students reported that they were able to get into character and embody the characters they were studying, leading to more productive discussions emerging from the VR sessions when compared to the more traditional 'seminar' approach.

Reflecting on this experience, Dr Childs stated that technology can be a means to emotionally engage students, create community, and connect with them as people. "Learning is about emotional connection, and so is technology, if you get them right". This project successfully pulled together various disciplines and technical experts to design an approach to utilising Edtech tools that transmit knowledge and convey emotion.

### Recommendation 9:

**UK Research and Innovation (UKRI) and HEIs should prioritise project funding for research and development of Edtech solutions and digital learning materials co-produced by academics, learning technologists, and developers.**

## 5.5 Contracting and Licensing Practices

The focus groups highlighted several practices that have become commonplace in the HE sector, especially regarding the procurement of digital resources. Through the discussion, we found some examples of recurring unfair behaviour:

<p>Transitioning to Software as a Service Model (Edtech as a service, rather than a product)</p>	<p>Vendors providing software systems as a product are moving to a software-as-a-service (SaaS) model without giving HEIs enough time to consolidate their options and run an entire tender exercise. In one case, a vendor announced their transition to a SaaS model, providing HEIs less than a year to decide to shift and a further two years to implement the changes, despite tender exercises taking much longer to complete under current procurement rules. Further, once an institution has decided to shift, providers are expected to begin paying SaaS rates, irrespective of the fact that the transition has not yet taken place.</p>
<p>Price Hikes on Renewal</p>	<p>Price hikes are announced suddenly, often without factoring in the time needed for HEIs to consult the market and make informed decisions. In one case, a vendor increased prices up to fourfold with limited justifications for why this price hike occurred. Buyouts and commercialisation are also increasingly becoming problems for HEIs—just in 2021, \$20.8 billion of venture capitalist investment flooded the Edtech market. For many publicly funded HEIs, it is increasingly challenging to sustain digital contracts during aggressive price hikes.</p>
<p>Introduction of data storage costs</p>	<p>Vendors have started restricting free cloud and data storage, introducing new costs upon renewal. Although this phenomenon has occurred globally, with many HEIs worldwide being impacted, HEIs in the UK have particularly been affected due to earlier renewal dates. By the end of February 2024, HEIs will be subject to new costs for data storage – a mere four months after the announcements. This is particularly an issue as HEIs are expected to collect and report data for regulatory and finance purposes. For example, the OfS requires the sector to retain student records for up to five years.</p>
<p>Premium Pricing on Specific Components and Lack of Interoperability</p>	<p>A vendor may supply a particular product that comprises multiple components. The group reported that, in some cases, vendors had used a different license or price model for that specific component. Because that specific component will be embedded into other systems, HEIs cannot opt out of the said component without having to abandon the complete product set. Another example is when vendors have different levels of licensing with varying levels of non-functional requirements built in, encouraging buyers to opt for the highest level.</p>

In the cases above, changes in prices or operating models are often announced with little room for negotiation and representation from the HE sector. Furthermore, the timelines provided are not feasible for HEIs: when a single institution hosts more than 700+ platforms and software at a single point in time, even a minor change to the digital ecosystem can be costly and time-consuming. As HEIs are not provided with enough time to reconsolidate the market and choose options that drive value for money, many are stuck in contracting and licensing practices that reduce competition and deploy unfair practices.

It is important to note that many of the platforms that impact learning the most are often generic rather than small-scale – such as Google, Teams and so on. HEIs have increasingly less choice over additional plugins and tools that integrate into central platforms without collective and/or government intervention. Contributors to the inquiry voice that this is particularly urgent, “because the UK is outside the scope of the only good regulatory framework, which is the European Union’s”.<sup>58</sup>

## Competition and Markets Authority (CMA)

The CMA is an independent non-ministerial department of the UK Government. It plays a crucial role by promoting competitive markets and tackling unfair behaviour to benefit consumers, businesses, and the UK economy. One of its primary responsibilities is to identify and investigate anti-competitive practices, such as collusion or abuse of market dominance, which can hinder new and existing Edtech firms from competing on a level playing field. Through market investigations, the CMA can identify systemic problems that affect consumer interests in the Edtech sector, recommending changes to regulation or taking enforcement action against unfair practices. This helps to ensure that the Edtech industry is fair, competitive, and beneficial to both consumers and businesses in the UK.

## Digital Markets, Competition and Consumers Bill

The Digital Markets, Competition and Consumers Bill (DMCC Bill) introduces significant changes to the UK’s competition law framework, affecting the CMA’s ability to conduct market investigations, particularly in digital markets. The DMCC Bill aims to address various issues identified in the current market inquiries system to make investigations more efficient and effective for consumers and businesses alike.

On December 5, 2023, the DMCC Bill had its second reading in the House of Lords, where several peers voiced support for introducing a collective action regime for consumer claims. The current regime requires consumers to bring claims on an individual basis, but allowing collective action would benefit HEIs by enabling a collective voice to investigate anti-competitive and unfair behaviour as deployed by some suppliers. The changes proposed in this Bill would increase efficiencies in market investigations by granting the CMA greater flexibility to prescribe the scope of the market investigation. This change would especially suit the rapidly evolving Edtech market and would deliver benefits to consumers at a faster rate than what is currently feasible.



The DMCC Bill introduces wide-ranging reforms to consumer protection laws, strengthening the authority's ability to enforce consumer protections through a new regime that will be monitored solely by the CMA – which dispenses the need for lengthy court proceedings. It represents a pivotal moment in the regulation of digital markets in the UK. By granting the CMA and the newly established DMU enhanced powers and flexibility, the Bill aims to address the unique challenges posed by digital markets, including market dominance, anti-competitive practices, and consumer protection issues – issues pertaining to the HE sector in procuring IT solutions and Edtech for learning.

### **Recommendation 10:**

**The Competition and Markets Authority should conduct a 'market investigation' into Edtech, with the aim of improving licensing and contracting practices.**

By monitoring the Edtech sector for anti-competitive practices or unfair behaviour, enforcing regulations that promote fair competition and consumer protection, and collaborating with sector-specific regulators, the CMA can contribute to a more competitive and innovative Edtech market in the UK. Considering cases presented in the focus groups and the new powers awarded to the CMA through the DMCC Bill, the Commission calls for a market investigation into the Edtech industry to improve licensing and contracting practices.

## **Crown Commercial Service (CCS)**

The CCS is a focal entity within the UK public sector, functioning as the country's most prominent public procurement organisation. Its primary role is to assist various public sector organisations, including those in the higher education sector, in achieving cost savings and efficiency in their procurement processes. By leveraging its extensive commercial expertise and the collective purchasing power of its customers, CCS can secure the best commercial deals, thereby safeguarding the interests of taxpayers.<sup>59</sup> For universities specifically, CCS offers a comprehensive suite of commercial solutions designed to meet the diverse procurement needs of these institutions. This includes access to over 100 professionally tendered frameworks and agreements that are compliant with procurement regulations and deliver maximum commercial value. Universities can benefit from competitively priced goods and services from a wide range of suppliers, including a growing number of SMEs across the UK. In summary, the relationship between CCS and the higher education sector is characterised by its role in facilitating efficient, compliant, and cost-effective procurement processes.

HEIs have access to a range of public sector frameworks through which they can procure Edtech, including G-Cloud 13, Digital Outcomes (DOS) 6, and Technology Products and Associated Services 2 (TePAS-2).<sup>60</sup> However, the use of CCS agreements is not mandatory for public bodies, and not all HEIs are subject to public contract regulations. This has resulted in a low uptake of CCS frameworks across the HE sector.

## Problems with current framework agreements

The inquiry's Call for Evidence asked respondents whether there should be a standardised, national framework for Edtech procurement across the HE sector. We received mixed responses on each side of the spectrum, reflecting the complexity of the issue. Current frameworks are produced by sector bodies (e.g. purchasing consortium, Jisc, etc.) or by government (e.g. through CCS). This section focusses on public sector procurement framework agreements made by the CCS.

Nous Group, an international management consultancy that works closely with the HE sector, reported that current CCS frameworks are 'insufficient for Edtech procurement', as frameworks are too generic, administratively burdensome and generally not well understood by the HE sector.<sup>61</sup> Frameworks are often made with the entire education sector in mind – such as CCS's TePAS 2 framework agreement – which means that many of the suppliers registered with the agreement are not specialised for HE delivery and disincentivises institutions from using them.

Additionally, the current frameworks for procuring Edtech are short-lived, as most public authority frameworks have a maximum term of four years. Although this is to ensure that frameworks are responsive to technological change and can remain flexible, focus group members voiced that longer-term contracts would enable providers to closely monitor their return on investments into digital platforms and services and make more informed decisions at points of renewal. However, the Procurement Act 2023 provides more leeway to a contracting authority to increase its term as long as the nature of the goods or services justifies doing so (s.47). It will come into effect in October 2024. We find that this may be a good opportunity for CCS to coordinate with the HE sector in adjusting framework agreements with the dual aim of 1) raising the profile of the CCS in HE and 2) establishing framework agreements that serve the sector's unique needs.

### Recommendation 11:

**Crown Commercial Services (CCS) should coordinate with HEIs to tailor framework agreements and timelines to meet the sector's needs, helping to reduce administrative burdens for providers looking to procure new Edtech.**

# 6. Regulation and quality of digitally enhanced blended learning

## Section Overview:

Regulation and quality assurance are critical for developing blended learning approaches to ensure that education delivery is effective, equitable and maintains high standards. Emerging practice should be assessed independently and with oversight to support the UK's internationally renowned reputation of excellence in higher education. In 2023, the Quality Assurance Agency for HE (QAA) demitted its status as the Designated Quality Body (DQB). As such, regulation and quality assurance are currently overseen by the OfS. Although the regulatory body provided some practical guiding principles, the metrics for assessing the quality of blended provision could be clarified to guarantee quality education rather than penalise innovative practices. HEIs and educators referred to the OfS Blended Learning review as a helpful starting point. Nevertheless, much more must be done to incorporate nuanced metrics that capture a student's blended learning experience. This section discusses the importance of balancing maintaining quality standards and supporting educators to develop their teaching practice further.

## 6.1 Quality Assurance of Blended Learning

Since its conception in 1997, the QAA has played a pivotal role in ensuring the quality of teaching and learning practices across the UK. The QAA is unique because its remit extends into the devolved nations as it acts as the independent quality body to review, assure, and enhance the quality of higher education. Other comparable HE systems with devolved higher education policies (such as the United States, Canada, and Australia) often do not have a common set of quality assumptions or a centralised approach to assurance. However, the QAA has established the UK Quality Code (the 'Code'), acting as the custodian of UK-wide sector benchmarks for quality in higher education by establishing a standard set of principles for internal and external quality assurance. Notably, the Code holds regulatory status in Scotland, Wales, and Northern Ireland but is no longer a part of the regulatory framework in England due to its de-designation as DQB in 2023.

The QAA's comprehensive evaluation of blended learning practices can include examining the effectiveness of online engagement or learning software (such as Virtual Learning Environments), the accessibility of digital resources, and the extent to which digital technologies can enhance learning outcomes. Providing guidance and sharing good practice can ensure a student-centred approach to developing blended learning. Similar associations have led the way in publishing guidance, such as the European Association for Quality Assurance in Higher Education (ENQA) publication, 'Considerations for Quality Assurance of E-Learning Provision'.<sup>62</sup> We can see how such documents have helped shape the quality regime for a HEI; for example, Dublin City University published its 'Principles for Quality Assurance of DCU E-learning and Blended Provision' in 2021, which incorporates many of the ideas established in ENQA's guiding document and commits to upholding a high-quality standard for blended provision.<sup>63</sup> DCU's principles cover a range of areas, such as the appropriate use of online technology (EQNA, p.10), designing courses for flexibility (EQNA, p.5), and stressing the importance of defining standards to students (EQNA, p.8).

Like the ENQA guidance document above, the OfS (current DQB for England) published its Blended Learning Review in 2022, although the document is framed by the regulation metrics rather than principles. The report comes to sensible conclusion on “online and blended” learning comes to sensible conclusions on how to avoid poor quality, cheap online equivalents and about the optimal balance between in-person and online provision that is underpinned by sound pedagogic reasoning.<sup>64</sup> Furthermore, sector organisations such as Jisc, have published guidance on what this pedagogic reasoning may look like, through reports such as their “approaches to curriculum and learning design across UK higher education” and “beyond blended” reports. Given that there has been advancements in the realm of digital education and online delivery, we believe the sector is prepared for more nuanced definitions of blended learning practice that are scaffolded by strong pedagogic principles. This report covered a few of the ways in which HEIs have innovated their practice and approach, but we believe there could be centralised efforts to clarify expectations and how the sector’s regulator, the OfS, prioritises them in the current metrics-driven approach.

## 6.2 Regulatory Landscape in England

The HE sector is facing a significant challenge due to the regulatory landscape’s lack of consistency and stability. This diverts resources from developing teaching practices, investing in digital infrastructure, and improving students’ experiences. In England, quality assurance is currently undertaken by the regulator (OfS), and there is no independent review of all HEIs equivalent to that in the other UK nations.<sup>65</sup> The OfS launched investigations into the quality and standards of business courses at eight universities and colleges in May 2022, and assessment reports were published in September 2023. Even so, the “majority of providers have not had independent quality reviews for many years”.<sup>66</sup>

Participants in evidence sessions have reported that universities are highly regulated, and even teaching and learning designs are subject to stringent regulations. The overlapping and contradictory requirements of the regulatory landscape have resulted in duplications of regulatory activities and increased administrative burden. For instance, the OfS conditions of registration, specifically condition B4, require universities to retain students’ assessed work records for five years after the end date of a course, resulting in high operational costs for HEIs.<sup>67</sup> Between 2019 and 2022, the HE sector spent around an average of £8.7m on activities that respond to regulation – based on a collection of numerous activity codes representing different types of monitoring, reporting, impact assessment, policy management and more.<sup>68</sup> Regulatory bodies need to be more responsive to the changing economy and rapid digitalisation of society and create an environment that is conducive to innovation and growth of HEIs. As Recommendation 12 calls for further assessment of the quality of blended provision across the sector, we urge HE regulatory bodies to assess their impact on institutions and students and prioritise intervention only when risks are identified rather than due to regulatory mandates.

### 6.3 Risk of additional burden

As blended learning is an evolving practice, there is still much more that needs to be understood about how it is delivered. Teaching staff at the evidence sessions discussed whether there is an optimal ‘blend’ between online and in-person provision, which approaches have led to better outcomes and higher pass rates, and questions on how to integrate digital tools into lectures, seminars, and other activities. Only now, four years after the ‘leap to online’, are we able to see how blended learning approaches have impacted student experiences and outcomes. We find that regulatory and quality assurance frameworks indicate a need for the integration of more nuanced metrics, as current frameworks can restrict institutional autonomy in deploying teaching practice and are overtly prescriptive. Regulators should approach any frameworks with flexibility as progress is never entirely risk-free: regulatory exercises must be modernised to keep up with the pace of emerging technologies and potential disruptors (such as Generative AI).<sup>69</sup> In doing so, regulatory bodies can safeguard the reputation of the UK’s world-class higher education system.

However, contributors voiced that any introduction of new metrics often becomes a new additional burden and cost for institutions. The Teaching Excellence Framework (TEF) is one example: although it is a helpful exercise that encourages providers to reflect on the efficacy of provision, including blended delivery, it has also been shown to increase burdens for staff who spend months trying to complete their TEF submissions.<sup>70</sup> In a conversation with Andy Youell, Executive Director of Digital and Regulation at the University College of Estate Management, we found that burdens for institutions to collect and retain high quality data can be addressed by reducing data duplications across regulatory exercises. In light of this, the Commission urges that any new quality assurance metrics adopt a risk-based, low-burden approach to empower educators to innovate. Under this approach, regulators would be able to establish a baseline standard while promoting the growth and expansion of blended provision.

The OfS should continue to evaluate the impact of digital technology and online provision on student outcomes and explore ways to use blended learning as a vehicle for reducing the attainment gap among students and widening participation. The assessment and assurance of quality teaching and learning practices need to be more cohesive to empower educators to elevate teaching practices further.

#### **Recommendation 12:**

**The Office for Students should establish a single, coherent approach for assessing the quality of online and blended learning as the designated quality body, ensuring that metrics do not impose additional bureaucratic burdens on the HE sector.**

# Conclusion

In the rapidly evolving landscape of higher education, the integration of digitally enhanced blended learning has emerged as a crucial strategy to address the diverse challenges and opportunities presented by the digital age. This report has examined the key aspects of leadership, staff support, digital inclusion, employability, procurement of Edtech tools, and regulatory frameworks that are essential for the successful implementation and quality assurance of digitally enhanced blended learning. It is crucial to synthesise these insights and chart a forward-looking path that utilises these elements to create an inclusive, responsive, and workforce-oriented educational environment.

The HE sector has faced a multitude of challenges post-pandemic; however, the Commission found that there is remarkable resilience and adaptability across institutions and an even greater appetite to innovate higher education practice and delivery. This report has provided evidence of excellent practice and pedagogical innovation across the sector, with the hopes of highlighting the magnitude of accomplishments our institutions have managed. We strongly believe the next step is to think about the 'digitally-enhanced' aspect of blended provision, which is demonstrated by the sections regarding procurement of emerging Edtech solutions and the need to modernise curriculum, assessment and learning design.

The Commission found that the successful implementation of digitally enhanced blended learning depends on a holistic approach that integrates leadership, staff development, digital inclusion, employability alignment, strategic Edtech procurement, and robust regulatory frameworks. As institutions navigate this complex landscape, it is crucial to foster collaboration, innovation, and a student-centred approach to learning. By embracing the transformative potential of digital technologies, higher education can not only address the challenges of the digital age but also unlock new opportunities for enriching the educational experience and empowering learners for success in the modern workforce.



# Methodology and Contributions

To gather evidence for this inquiry, we held three evidence sessions that facilitated open discussions with educators/academics, students, employers, and professional services staff. Participants were asked to prepare a short oral contribution to address discussion questions shared before the evidence sessions. Each session was recorded and transcribed. An executive summary of each session is available on Policy Connect's website.

Alongside the open discussions held in Parliament and the University of Derby, we also gathered evidence through various research activities, including:

- **(8) Semi-structured interviews:** one-to-one conversations with preset questions between subject and researcher for 1 hour, recorded and transcribed.
- **(2) Focus Group Sessions:** arranged and chaired by UCISA on behalf of the Higher Education Commission.
- **(30) Call for Evidence:** public consultation with sector representatives and stakeholders.

Various qualitative methods were used to strengthen the findings' validity and ensure that key takeaways were consistent with insights from across the sector. Interviews provided rich, in-depth details on the experiences of teaching staff, learning technologists, and professional service staff. The focus group, arranged and chaired by UCISA, provided a snapshot of a highly technical area (i.e. Edtech procurement) and agenda priorities for improving the current approach to using, procuring, and adopting Edtech.

Organisations and membership groups provided valuable insights into challenges and solutions during the shift to digitalisation in HEIs as a response to the public call for evidence.

## Steering Group Members

Chair	Lord Norton of Louth	House of Lords
Co-Chair	Prof. Kathryn Mitchell	University of Derby
Member	Barry Sheerman MP	House of Commons
Member	Joe Fitzsimons	ACCA Global
Member	Smita Jamdar	Shakespeare Martineau
Member	Liam Earney	Jisc
Member	Sarah Knight	Jisc
Member	Elizabeth Newall	Jisc
Member	Henrietta Mbeah-Bankas	NHS England
Member	Dr. Rhys Morgan	Royal Academy of Engineering
Member	Deborah Green	UCISA
Member	Prof. Denise Whitelock	Open University
Member	Prof. Helen O'Sullivan	Association for Learning Technology (ALT)

## Evidence Session Attendance

### *Session One*

Dr Mark O'Hara	AdvanceHE
Jason Zheng	Imperial College London Student Union
Dr Carmen Miles	De Montfort University
Dr Kate Wicklow	GuildHE
Dr Diana Beech	London Higher
Joanna Burton	Russell Group
Joanna Stroud	UCL Digital Education
Dr Andrew Bingham	Teesside University
Dr Julie Voce	City, University of London
Matthew Merskine	Minerva University
Prof. Mark D'Inverno	Goldsmiths University
Natasha Bonnelame	London College of Fashion
Ellie Gomersall	NUS Scotland
Gurur Deniz Uyanik	Disabled Students UK
Anna Matthews	Independent Higher Education
Eve Alcock	QAA
Dr Dave Thomas	Higher Education Academy (SFHEA)
Prof. Jennie Marie	University of Greenwich
Prof. Anthony Michael	Queen Mary University of London

### *Session Two*

Richard Blackmore	East Midlands Chamber
Katrina Pierce	Federation of Small Businesses
Graham Hasting Evans	NOCN Group
Tony Randall	Shoosmiths
Elizabeth Newall	Jisc
Prof. Siobhan Nearey	University of Derby / Careers Development Policy Group
Rebecca Passingham	Unison
John Hill	University of Derby



## Evidence Session Attendance (cont)

### Session Three

Dr Tharindu Liyanagunawardena	University of Reading
Dr Velislava Hillman	London School of Economics and Political Science
Sarah Knight	Jisc
Gareth Cutts	NOCN
Dr Freeha Azmat	University of Warwick
Dave Sherwood	Bibliu
Matthew Smith	Chegg
Prof. Mike Sharples ( <i>emeritus</i> )	Open University
Julie Mercer	NOUS Group
Prof. Sara de Freitas	University of Suffolk (former)
Natalie Lafferty	University of Dundee, Heads of e-Learning Forum
Julia Adamson	British Computing Society
Anna Artemyeva	Google

## Interviews

Dr Freeha Azmat	University of Warwick
Prof. Mark O'Hara	Advance HE
Prof. Anthony Michael	Queen Mary's University of London
Dr Tharindu Liyanagunawardena	University of Reading
Mark Childs and Dr Alistair Brown	University of Durham
Dr Janja Komljenovic	University of Lancaster
Dr Simon Thomson	University of Manchester
Prof. Sara de Freitas	University of Suffolk
Bernarde Hyde, Gemma Payne & Joel Arber	Southern Universities Purchasing Consortium (SUPC)
Prof. John Traxler	University of Wolverhampton
Dave Sherwood	Bibiliu
Dr Velislava Hillman	London School of Economics and Political Science
Andy Youell	University College of Estate Management
Dr John Traxler	University of Wolverhampton
Uddalak Datta	Shakespeare Martineau
Herk Kailis	Cadmus
Dr Maria Limniou	University of Liverpool

## Written Submissions

NHS England	Teesside University
Open University (Institute for Educational Technology)	Imperial College London Student Union
Advance HE	London Higher
Quality Assurance Agency (QAA)	Jisc
Queen Mary University of London (QMUL)	University of Durham
Office for Students (OfS)	ACCA Global
University of Suffolk	NOUS Group
University College London / Royal National Institute for Blind People	University of Liverpool
Kent and Medway Medical School (KMMS)	Achilles (Utilities Vendor Database)

## Comments

Dr. Jenna Waters	University of Derby
Dr. Carmen Miles	De Montfort University
Helen Beetham	Jisc
Sheila MacNeil	Jisc
<b>HE Digital Inclusion Network</b>	
Prof. Raheel Nawaz	University of Staffordshire
Prof. Simeon Yates	University of Liverpool
Laila Burton	Open University
Charlotte Coles	Times Higher Education
Freddie Quek	British Computer Society (BCS) Digital Divide Specialist Group, #Joiningthedots and Digital Poverty Alliance (DPA)
Paul Finnis	Unconnected.org, Digital Poverty Alliance and Learning Foundation (former)
<b>BCS Digital Divide Specialist Group</b>	
James Davenport	University of Bath

## Comments (cont)

### HotTopics Community of Higher Education Technology Leaders

Dough Drinkwater	HotTopics Convenor
Mark Bramble	Oxford University
David Ivell	Marlow Business School
Laura Dawson	London School of Economics (former)
Ash Roots	University of Exeter (former)
Jots Sehmi	City St. George's University of London
Jason Oliver	Sussex University
Tracey Jessip	De Montfort University
Danny Attias	London Business School

## Focus Group

Deborah Green (CEO, Chair)	UCISA
Mel Gomes (Head of IT Commercial Management and Contracts, Chair of UCISA Transforming IT Procurement Working Group)	Royal Holloway University of London
Rob Moore (Acting Associate Director, IT Operations, Chair of UCISA Procurement Group)	Leeds Beckett University Head of Service Governance
David Telford (Executive Director of Information Services)	University of Stirling
Brian Henderson (Director of Digital & Information Services)	University of Aberdeen
James Crooks (Chief Information Officer)	University of Durham
Sarah Cockrill (Director of Digital Strategy and Information Technology)	Canterbury Christ Church University
Paula Vickers (Pro-Vice Chancellor and Director of CCSS)	Middlesex University London
Gareth McAleese (Head of Enterprise Applications and Data)	Ulster University
Mark Hardy (Deputy Head of Procurement)	University of Sheffield

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