Digital learning rebooted

From 2020’s quick fixes to future transformation

From fixes to foresight: Jisc and Emerge Education insights for universities and startups

Report 4
From fixes to foresight: Jisc and Emerge Education insights for universities and startups

At Jisc and Emerge Education, we believe that education technology (edtech) has rich potential to help UK universities solve their biggest challenges. We see edtech startups as key to the innovation and agility that higher education needs to navigate the rapidly changing present and future. This is a critical part of building a sector that is resilient to unforeseen changes and that can further transform using advanced technologies, as part of our vision for an Education 4.0.

We have worked as close partners for several years and our collaboration brings together Jisc’s 30+ years of experience in providing digital solutions for UK education and research, and Emerge’s in-depth knowledge of the edtech ecosystem based on investments in 55 startups in five years. Together, we’ve developed unique insights into the potential of edtech in higher education.

To unlock that potential, we’re undertaking a programme of research. It’s focused on exploring the most urgent priorities that university senior leaders will face over the next three years, which we investigated and set out in our initial joint report, The start of something big? Can edtech startups solve the biggest challenges faced by UK universities?

**Priority one**
Delivering the best, most equitable student experience.

**Priority two**
Adapting to students evolving expectations about employability and career outcomes.

**Priority three**
Expanding the university’s reach by attracting more (and more diverse) students.

**Priority four**
Transforming digital and physical infrastructure.

**Priority five**
Recruiting, retaining and developing world-class staff.

Each report in this series explores aspects of each priority in more detail, mapping current approaches and challenges, and highlighting specific edtech solutions and startups. The reports draw on the expertise of leaders from HE, employers and startups, through Jisc – Emerge Education advisory groups on specific topics, including the future of assessment, the employability journey of students from underrepresented backgrounds, student recruitment in challenging times, employer-university collaboration and the student mental health and wellbeing challenge.
We find that there are plenty of opportunities for startups to hear from each other but very few for them to hear from real customers – universities – and understand, in depth, the priorities they have and the problems they are facing. This report series does that, providing startups with the information they need to shape their products so as to ensure they meet university needs. For universities, the series offers insights into how the sector is managing change as well the possibilities for the future.

The work on the reports was well underway when the Covid-19 pandemic hit, and we have seen the university sector adapt more rapidly than many thought possible to the challenges of digital delivery. But in the midst of crisis, it is important to draw a clear line between our immediate response and what it tells us about the future. This work is part of Learning and teaching reimagined, a sector-wide initiative focused on providing university leaders with inspiration on what the future might hold for higher education, and guidance on how to respond and thrive in those environments.

Ultimately, we want to build a vibrant, highly effective edtech ecosystem, with seamless collaboration between universities and leading startups, to ensure students get the educational experience they deserve.

CONTENTS

Summary 2
Part 1: The emergency response 6  Supportive 25
Six fixes 7  Part 3: From fixes to the future 27
Challenges 18  Digital learning – market map 31
Part 2: The vision – towards 2030 21  Insights for startups 32
Intentional 22  Aula Q&A 33
Seamless 24  Acknowledgements 35
The situation through which we are living has given us time to reflect on aspects of teaching and learning that have been bubbling under for some time.

Our student populations live their lives digitally, as do many academics, yet the campus has clung to its physical estate and, in a sense, merely tolerated the addition of a virtual learning environment.

The global pandemic has demonstrated that both the physical and virtual estate need to be developed with equal commitment. Our virtual campuses must become equal-status elements of our existence as universities. This will require financial investment.

This report, developed through conversations with both universities and the edtech world, expresses with great elegance the need for this investment and development to be done intentionally, seamlessly and in a supportive manner. To be intentional in the way in which we conceive and build the virtual estate; to provide the seamless experience our students expect from their other digital interactions – and all done in a way in which learning is supported. This involves technology in helping personalise the education experience but also means that we must be aware of the risk of embedding new inequalities just as we are starting to challenge the significant disparities of attainment on our campuses.

Throughout this report it is clear that students and teachers must be placed centre stage in the digital age. The academics on the front line who are designing and delivering the learning experiences with and for our students need to be supported both by the technology and by the university itself: teaching is a team sport. Some staff may have to step away from how they were taught in order to be able to adapt to a new future. Training and development is a first step.

We hope that universities and edtech startups, policymakers and innovators alike will find this report stimulating and useful as we move into a new phase of digital learning in our universities, and all the opportunity and challenge that it brings.

Ian Dunn
Provost, Coventry University

Gideon Shimshon
Associate principal digital learning and director of QM Online at Queen Mary University of London
Introduction

The digital maturity of UK higher education institutions varies tremendously.

Some have well-established digital strategies and the staff capabilities and infrastructure to deliver them; others are in the early stages of their digital readiness. These levels of digital preparedness were exposed and tested in a way no one had ever expected when universities were forced to abandon campuses in March 2020 and to rely wholly on digital learning and teaching.

Spring 2020 was primarily about doing whatever was needed to get through. For some, this meant scaling up whatever was already in progress while others were starting from near-scratch, leading to a very broad range in the quality and sophistication of the learning provided. But the effect of all this implementation and initiative-taking was to turbo-boost UK HE’s long journey into digital learning.

Major providers of educational and collaboration platforms became household names within the sector through their ability to support and often provide necessary infrastructure, at scale and at short notice. But what universities mostly required at this point was the means to deliver already-designed, though sometimes tweaked or redesigned, pre-existing learning, teaching and content.

As 2020/21 looms, and with it the realisation that it is the start of the future, not a resumption of the past, the sector is waking up to the need not just to deliver what’s already in the pipeline but to embark on a fundamental rethink of learning design for digital. To redesign the learning and teaching experience.

In the first part of this report, we look at the immediate challenge of spring 2020, identifying five distinct types of response that we illustrate with short case studies involving six universities. These approaches can be seen as stepping stones for what comes next, both in the short term – it is increasingly unlikely that campuses will be fully open for the new academic year – and in the longer term. In the next part, we look ahead to 2030 and to a goal of fully rethought digital learning that is seamless, intentional and supportive.

And then we ask, how do we move from here to there? What can we learn from the experiences of this spring and summer? What does higher education need in order to get there? And in the evolution from delivery to redesign, how can edtech startups help?
In March 2020, as university campuses closed for face-to-face learning, UK higher education embarked on a sudden shift to digital learning. In the vast majority of cases, this wasn’t a designed and fully realised transformation of teaching and learning. It was an emergency response to an unprecedented situation that relied on upskilling staff rapidly enough to enable them to deliver the remainder of their courses, and assess them, in as effective and equitable a way as possible. The extent of this shift, and the tools, techniques and platforms used, varied not only between universities but also within them, depending on the demands of different departments and the confidence and capabilities of their staff.

At an institutional level, the starting point depended on each university’s current state of digital maturity, its goals for the immediate period, institutional values and, for some, their longer-term digital learning strategy.

Based on interviews with a number of institutions, we can identify five approaches to digital learning in this emergency period: trailblazing, innovative, radical, flexible and incremental. While each of these approaches is illustrated here with a short case study reflecting the characteristics and experience of the university under the lens, many institutions will find that their own approach fits broadly into one of these categories.

The range of challenges highlighted by these approaches offers an insight into the issues that need to be tackled in the medium term and the opportunities they present for digital learning.
Six fixes

1 Trailblazing
Full-blown, deep-rooted change at scale

Example: University of Northampton

What was Northampton's starting point?
The University of Northampton started from a strong position. Since 2014 it had been moving towards its current institutional approach to learning and teaching: active blended learning (ABL). While never perceived as a large-scale online learning or distance learning strategy for campus-based Northampton, successful ABL does rely on fluent, purposeful and thoughtful use of technologies for learning, which stood the university in good stead when lockdown hit in March 2020.

“There was a high level of understanding of the use of digital tools in learning and teaching. Staff overall showed a significant level of digital fluency. There was a culture of capitalising on the benefits and affordances of technology. What we never imagined was that those advances, in pedagogic, staff development and learning technology terms, would prove to be so critical in a situation like the one that we would be facing throughout 2020.”
Alejandro Armellini, dean of learning and teaching

What did Northampton do?
As a result, much of the teaching that took place was well planned rather than a rushed emergency response. It was, as Alejandro Armellini puts it, “business as usual in this scenario.

“The features, definitions and models that we associate with active blended learning are the same as those in active distance learning, with the exception of campus-based contact. Everything else, eg personalisation, time on task, sense-making, knowledge construction, critique and student centredness, remained exactly the same. The fact that we shifted to active distance learning did not mean a shift back to teacher centredness, to stand up and deliver, stand up and spout. On the contrary, all the key pedagogic principles remained.”

Teachers found that, thanks to the work they had done in the past few years around active blended learning, they were able to apply those lessons in the context of an unexpected scenario like this and do so quickly.

What were the challenges?
While there were inevitably some immediate challenges around adjusting to new ways of working, a greater concern for Alejandro is looking ahead to the new academic year.

“Learning activity has to be a fun and enjoyable activity. So, whatever the scenario is in a few months’ time, we need to think about what is it that we did so well in this environment?
“What is it that we didn’t get right? What can we keep, what can we remove? That doesn’t just mean tools or environments. It also means what’s synchronous, what’s asynchronous, what interactions – learner-learner, learner-tutor, learner-content – are best channelled in a synchronous or asynchronous way, in a face-to-face physical environment or in an online environment? The answers will vary from discipline to discipline, from person to person, but those are the issues we need to address.”

There are also challenges around community building. One of the benefits of the crisis occurring when it did was that, in most cases, tutors and learners knew each other and they already had an element of trust built in. With first year students arriving in September, new relationships and sense of cohesion and belonging will need to be built from scratch in an environment with limited face-to-face contact time.

**How is technology helping or hindering?**

Northampton has a ‘concentric circle’ ecosystem of tools with a central circle of core supported technologies, including key packages such as Blackboard, MS Teams, Cisco Jabber, Skype for Business, Webex, SharePoint, OneDrive and, more recently, Padlet. The next circle, which includes Google tools, for example, is not centrally supported but ‘tolerated’, based on certain rules and guidelines. The third circle is technology that is not tolerated. That includes Zoom.

“We could do things even better, but it’s a reasonable compromise between value for money and the needs of students and staff.”

---

**Innovative:**

Building on an innovation base and scaling it up

**Example: Coventry University**

**What was Coventry’s starting point?**

Coventry has been engaged with digital and blended learning for some time on a small scale, alongside and embedded within campus-based learning and teaching. In 2017, it established Coventry University Online, using the FutureLearn platform, becoming the MOOC provider’s second degree partner university after Deakin University, Australia, and offering a portfolio of courses that will eventually number 50 undergraduate and postgraduate degrees online. In April, it launched the first ever fully online pre-sessional English course for international students.
What did Coventry do?

“We’ve talked forever about activity-based, problem-based learning. The Covid-19 crisis has accelerated that. That’s a good thing. As is the reduction in exams and the death of the exam hall. The move to allowing for more and more online learning materials, whether in the library or in the lab, is also a welcome development.”
Guy Daly, deputy vice-chancellor (education and students)

In March 2020, Coventry moved to fully online delivery, and is now developing its digital approach in a sustained way for the future. It took the decision to work with Aula on a new approach to learning design, fully transforming all of its programmes for online learning in just four weeks, ready for the May semester. Once complete, 75% of these programmes were described as ‘well designed’ in line with Coventry’s teaching and learning principles.

More generally, the university is taking a holistic approach, tackling the content of its courses through Curriculum 2025, to make sure that all its curricula are accessible and decolonised. It has developed a set of teaching and learning principles for online learning that deals with delivery and ensures that academics design assessments, deliver sessions and facilitate learning aligned to the Curriculum 2025 goals and combatting disadvantage.

What were the challenges?

Like most universities, staff digital capabilities and confidence at Coventry have needed a boost. The academic development team produced learning materials for colleagues and shared good practice but faced the issue that such training risks being taken up wholeheartedly by the willing and able when there is a need to bring everyone along on this journey. However, there is a risk that, without culture change and the learning design provided by Aula, students simply continue to receive the same content, but digitally.

“Historically, academics might have been brought up using an overhead projector and their parchment notes. Teaching and learning has very much changed since then. However, for newer academics, then being dropped in at the deep end and expected to be able to do all of this sort of stuff is quite an ask.”
Guy Daly

How is technology helping or lacking?

The planned switch to Aula from Moodle, following a successful year-long pilot of 1,800 students in which student engagement with learning content on a daily basis more than doubled, was accelerated by the move to online teaching and learning during lockdown.

“Aula is mobile-first, making it easily accessible for students, especially those who may not have access to laptops at home. It is also simple for our academic staff to use and will help us create an experience for students of being in a learning community and not being alone in their study.”
Andrew Turner, associate PVC for teaching and learning
Innovative flexible: Maximising flexibility and simplicity

Example: University of York

What was York’s starting point?

Pre-Covid, the University of York offered campus-based blended learning with a portfolio of fully online courses. The blended learning was predominantly asynchronous in design, with some staff using collaborative technologies but not in a uniform way across programmes.

“Although there’d been a small cottage industry of hybrid lectures and seminars led by staff using Blackboard Collaborate to connect remote participants to the classroom, conferencing technologies were not widely in use across the university.”

Richard Walker, head of programme design and learning technology, University of York

Since 2018, work had also been well underway on digital accessibility, to create usable, accessible learning resources in an environment in which all students have an equitable learning experience.

What did York do?

Initially, there was a rush to put in place online provision so that students could prepare for summer assessments. In some cases that involved simply replicating existing teaching models using Zoom, for which York invested in an institutional licence, and Blackboard Collaborate, with Google Meet in some instances, to mimic timetable contact time for lecture seminars, through synchronised conferencing. The key, says Richard Walker, was to keep things simple and contained.

“One of the principles was that we would base teaching on a small standard set of our centrally supported platforms and tools, which would be well-resourced – like our virtual learning environment, Panopto lecture capture service and our collaboration and assessment tools supported through the VLE. The key thing was to try to standardise teaching as much as possible so it could be supported, while at the same time giving staff the flexibility, if they needed it, to develop their own solutions.”

This brought about a significant upskilling of staff across the institution.

“We’ve seen an incredible response from staff, in terms of their take-up of our central training, particularly in relation to how to manage online seminars and how to curate video through at-desk recording using our Panopto service.”

What were the challenges?

The biggest challenge lay in supporting York’s students in China. There were latency issues for some key services as well as the issue of basic access – what Richard Walker calls the “Great Firewall of China” and the blocking of the Google Suite and YouTube in particular.
There was also a challenge for some performance-based disciplines that seek to include real-time, face-to-face teaching with remote participation. This creates major challenges for digital inclusion and equality, as well as from the perspective of access to hardware and suitable space, not only for students but for staff seeking to curate good-quality video.

“We’re providing rooms over summer on campus, set up to curate videos – effectively recording studios. But as teaching gets underway in the autumn term, we will have huge pressure on our physical campus due to social distancing, which is going to have implications for room time.”

**How is technology helping or lacking?**

Addressing specifically the issue of students in China, York was part of the initial testing for the Alibaba project.

“Through Alibaba we’ve seen real improvements. For instance, log-in time for our Panopto replay service goes from six minutes to three seconds, so if we can set that up, that would be great.”

More generally, the value of technology lies not so much in what was provided over summer 2020 but the difference its adoption has made to the future. As Richard Walker says:

“We’ve seen this change in mindset. I think we’ve accelerated things, from a digital strategy perspective, probably by five years in really getting engagement across all key university services. It’s also encouraged staff, in some circumstances, to completely rethink, redesign their teaching.”

For the next academic year, York is now looking to create a different student experience: fully flexible, pedagogically designed learning. This means structured learning pathways, flexible engagement methods and far more focus on asynchronous learning, which would ensure a common baseline for all students whether they are remote or face-to-face. This, says Richard Walker, requires a more purposeful design approach to teaching preparation, which is why York is investing a great deal of time now in providing training for staff on how to do that.

“Now we are focusing on what I would call digital fluency for staff, the pedagogical skills to design and facilitate technology-mediated learning effectively; it’s all about design as well as training in delivery skills.”
Radical:
Co-creating for a supportive student and staff experience

Example: University of Lincoln

What was Lincoln’s starting point?

Lincoln had been pursuing a campus-based, blended learning delivery for some time, based on its well-established and respected ‘student as producer’ collaborative programme of co-delivery. Within that, the university was working on a digital strategy to embed enhanced practice across the programme. Lincoln was embracing digital and pushing for its adoption, in partnership with academics and collaboration with students. For example, the LALT Digital Education and Student Life teams work with a team of students to support staff across the university by providing video support and creating video content. It’s an active and popular programme of additional asset creation to support the use of digital across the curriculum.

What did Lincoln do?

Lincoln, anticipating further restrictions on travel, published a new website, called Remote Teaching, a week before the national lockdown and brought together a wealth of resources to support its digital strategy.

“We use the term ‘teaching remotely’ deliberately rather than online learning. This was about doing the simple things and doing it well. And it was quite a rapid change, but then some academics hadn’t used tools like Blackboard Collaborate. It was a rapid upskilling of digital capabilities.”

Andy Beggan, dean of digital education

Andy Beggan’s team started running skills webinars ahead of lockdown and over the following weeks continued them daily on topics such as Blackboard Collaborate and using Blackboard for remote learning. There were also drop-in digital clinics. The website proved very popular, with 10,500 page views from Lincoln staff over the following six weeks, and 2,500 on one day at the start of lockdown.

The support provided was well received and successful: when Lincoln surveyed 60% of the staff about how the move to remote teaching went, two thirds felt supported or very supported during this period, with a further 27% saying they felt moderately supported. Fewer than 9% felt unsupported to some degree.

Looking ahead, Lincoln is building towards “an active, blended learning approach where we are emphasising the importance of agile delivery and making every contact time count, whether that’s virtual or physical,” says Andy Beggan. The university is undertaking a programme-level approach (known locally as ADAPT & EnABLE) and builds on five core principles: agility; timetabling and learning schedules; making every contact count; consistency, clarity and coherence; and one community. The
principle of consistency, clarity and coherence is further embedded through reusable components within Blackboard module sites, aligned to the learning activities within the UCL ABC (arena, blended, connected) curriculum design model, and presented as ‘recipes’ or ‘learning ingredients’ for academic reuse or inspiration.

“We’re using ‘recipes’ because it’s a very familiar term and it’s a way of suggesting localisation and adaptation. Recipes are best when people do adapt them to their own tastes. And that’s certainly what we want our staff to do. We recognise that our academics, the module leads, are the best people to choose how to deliver the teaching for their students. And the support we’re putting in place is there to enable staff to do this more efficiently through quick-start elements for reuse within the teaching. We are also embedding digital support materials within this process for staff and students to support.”

Andy Beggan

What were the challenges?

There were, inevitably, challenges. For staff these were primarily dealing with practical teaching elements and lab work and adapting assessments for online delivery. For students, access to technologies at home, such as specialist equipment and software, was also an issue. Bandwidth was an issue for some, and some staff reported a drop in engagement from their students who were struggling to cope with the sudden change.

How is technology helping or lacking?

Lincoln worked with a core suite of tools, promoting Blackboard as the learning hub, Collaborate for seminars, Panopto for recording teaching and Teams for meetings or tutorial groups. The intention was to keep everything quite simple and provide support in one place to staff or students, making it available to them when they needed it to be.

“How Blackboard pretty much did what it needed to, Panopto worked well. Collaborate was a revelation for some, mainly because of the back channel, which was well received and engaged some students who felt they had more instant contact with the staff. Teams was also seen as a revelation. I had spent many years advocating its use and it has now become a core tool overnight, with many staff independently exploring its potential for learning.”

Andy Beggan
Radical: Co-creating for a supportive student and staff experience

Example: University of Leeds

What was Leeds’s starting point?
Leeds was in a good position in terms of digital infrastructure for student learning, with industry-leading enterprise platforms, and solutions for live synchronous classrooms, in place and able to scale rapidly. However, there was less familiarity with the online assessment space and, like all universities, its staff digital capabilities varied widely.

What did Leeds do?
The university reprioritised resource very quickly to make rapid progress in providing staff with guidance, support and training, plus live online buddying help with their classes and a new helpdesk.

Leeds took an innovative approach by recruiting a taskforce of about 30 students whom it trained to buddy up with staff and provide live technical support during remote teaching. The students also worked on the helpdesk, answering emails from staff and students about all aspects of remote teaching.

While Leeds has a history of ‘student champions’ working on projects throughout the year within faculties, this was the first time that it had recruited a taskforce for buddying and helpdesk support, having seen such a system in action at the University of Groningen in the Netherlands.

It was a rapid response to the sheer scale of demand – the university holds 300 lectures a day and would never have been able to recruit enough staff in the timeframe needed – and it quickly proved its worth. The student taskforce has proved to be such a success that its role has been expanded and it is also now supporting the digital education service with online courses. The students will continue into the next academic year and more will be recruited.

“It’s good for everybody. Staff really appreciated having somebody there to help them because many of them had not done this before. The students get some extra skills on their CV and extra money in their pockets.”

What were the challenges?
“If you’re a final year engineering student who is expected to use CAD software to get your research project done, that’s pretty sophisticated computing power that you need: you would normally access it in a specialised teaching space with clusters of machines able to run it. Until we’ve got clarity on whether those spaces are going to be available, how are these students going to do this
work with their MacBook that’s not got the computing power that they need?”

Neil Morris, dean of education

Aside from the need for rapid upskilling and support of staff digital capabilities, there were – and continue to be – some digital access issues. Device provision is less of an ongoing issue than access to specialist software and connectivity in relation to adequate wifi provision in students’ homes.

In terms of digital pedagogy, the huge shift to using technology to provide inclusive, digital learning and teaching offers challenges and opportunities in the year – and years – ahead. Unless students need to be in specialised spaces, such as dance or theatre studios or laboratories, the default is likely to remain online for formal learning and teaching for some time. Neil Morris is keen that staff are supported to redesign their sessions as much as they can in the time available, putting the student at the centre of active and interactive learning that uses technology as effectively as possible.

How is technology helping or lacking?

Leeds found it relatively straightforward to move lectures and seminars online with existing platforms but found that two, much more recently acquired, tools came into their own in the assessment space.

Top Hat, a mobile voting platform, had been used by Leeds for less than a year as a tool for active learning and engagement in class. Following lockdown, its assessment capabilities also became clear for the first time and were used successfully by an entire medical year group.

An even more fortuitous development was that Leeds had only just procured Gradescope, a new Turnitin system, which uses AI to aid online assessment and marking. Neil Morris takes up the story:

“We’d literally just turned it on and started a pilot, expecting five or so people to use it during the academic session. We didn’t really know how it was going to be useful but, having heard that it’s very good for numeric assessments, we expected that the STEM faculties were likely to use it a lot. It went into business with a week’s notice and suddenly got used by thousands of students and hundreds of staff to deliver assessments in the STEM faculties. Everybody absolutely loved it and it became a bit of a lifesaver. Innovation definitely happened in the assessment space.”
What was University of the West of Scotland's starting point?

The University of the West of Scotland (UWS) like many other HEIs delivers and supports student learning in varying ways appropriate to the curriculum, as well as the skills, knowledge and experiences of academics associated with the portfolio of programmes. In common with many other universities, UWS had embarked on a ‘digitisation journey’ designed to develop a flexible, innovative 21st-century experience. Though innovative, it is true to say that the pace was measured and UWS was not ideally positioned to rapidly move from on-campus to online learning and assessment during lockdown.

Three weeks into an interim role, the newly appointed and interim PVC for Learning Teaching and Students, Dr Lucy Meredith, and team were tasked with pivoting a primarily face-to-face curriculum online, while ensuring learning outcomes were achieved, PSRB requirements met, authentic assessments set and marked, as well as fully supporting students so that they experienced no detriment.

The epidemic provided UWS with a time-limited opportunity, out of necessity, to innovate and respond at speed to a transformation that would ordinarily take place over a number of years. There is a renewed emphasis on improving the use of digital tools and platforms with a focus on accessibility.

In terms of academic staff digital capabilities, while there were pockets of excellence and some trailblazers, many others needed help and support.

What did UWS do?

UWS was fortunate in so far as the timing of its three terms meant that when lockdown began, the university was within two weeks of the end of its second term and very little teaching needed to be moved online. As a result, the university took what Lucy Meredith describes as a “fairly pragmatic approach”, giving academic colleagues suggestions about how they might cover the remaining content, depending on their capabilities and confidence:

“For some, it was simply saying, ‘give your students some good, directed reading, which will allow them to cover that content.’ For others, it was facilitating voiceovers on PowerPoints or tutorials. For others, it was saying, ‘well, if you want to run a synchronous activity or an asynchronous activity and record it, this is how you do it’.”

As a result, there was relatively little synchronous activity because staff were on a steep learning curve with Zoom, Teams or WebEx. There was some recording over existing PowerPoint presentations. However, the increase in staff confidence, along with UWS
enhancing its learning technology support, leads Lucy Meredith to feel more optimistic for the future:

“I think if it happened now, now that people have developed ability and confidence in platforms like Zoom and Teams, they would be really comfortable running a synchronous activity.”

What were the challenges?

Many of programmes at UWS have PSRB accreditation, which was an added challenge when it came to assessment. With little guidance forthcoming from many of the bodies themselves, UWS took the approach of assuring them that learning outcomes would be met and alternative assessment strategies put in place.

Some students have faced issues around digital exclusion, an area UWS is working hard to tackle through laptop loans and, for the coming year, getting a clear idea of where the gaps in provision are and the different ways they can be filled, from bursaries to equipment loans.

For academics, it is not only digital capabilities and confidence that have been a challenge but also the different approach to learning design required for good digital teaching and learning.

“My real main concern is just getting our academics to realise that we’re not expecting them to talk at students for three hours in a synchronous way online. There are different ways of doing things. I’ve also been trying to assure them that this is new to everybody and we’re not expecting perfection. We can’t be perfect in this situation. And, actually, good is good enough.”

Lucy Meredith.

How is technology helping or lacking?

For continuing students, UWS is sticking with Moodle on the grounds that changing platform would be too unsettling and risky at a time of so much other change. However, for the new intake of students, the University is investing in the Aula platform, which is characterised by simplicity and proven ability to build and enhance learning communities.

“If, for any reason, we need to pivot to something which is entirely online, we’ve got a fighting chance to build in a sense of community with those new students. With the existing students, community is important, but they’ve all seen each other, had a chat and already have a sense of community. For the incoming students, having the capability to build that community online quickly is going to be vital for their student experience and wellbeing.”
Challenges

INPUT

- Assessment
- Community building
- Subject specific needs

CHALLENGES AFFECTING STUDENTS

- Digital inclusion and equality
- Accessibility
- Student wellbeing
- Student digital skills

LEARNING DESIGN

- Staff digital capabilities and confidence
- Staff wellbeing

ENGAGEMENT

- Employment
- Value for money

OUTCOME
Learning design that transforms rather than translates – and the staff digital capabilities and confidence to design and deliver that learning effectively and engagingly – are immense challenges for UK universities. We’ll discuss learning design in more depth in sections two and three as it is critical to the long-term vision of digital learning in 2030, beyond the emergency response.

**Staff digital capabilities and confidence**

Staff comfort and confidence in designing, developing and delivering digital learning is fundamental. As a result, upskilling and confidence-building has been common feature of the emergency period – and has started from a low base. According to the Jisc 2019-20 digital insights survey, before lockdown 74% of teaching staff said they never taught in a live online environment, only 11% used live polling or quizzing and only 20% gave personalised digital feedback. Previously, only 34% of teaching staff said they had regular opportunities to develop their digital skills and a tiny proportion (9%) received any reward or recognition for developing the digital aspects of their role.

**Assessment**

From decisions about open book exams v remote proctoring along with balancing the requirements of awarding bodies, assessment has been a significant challenge in the ‘emergency period’, and one that we cover in detail in our earlier report in this series, Assessment Rebooted.

**Building community**

Embarking on entirely digital learning with students who have previously had the opportunity to form bonds with each other and teaching staff in a face-to-face environment is a much easier prospect than building a community remotely with a new cohort. Platforms that build community, along with institutional and departmental attention to induction (see Jisc’s guide to Planning induction for autumn 2020), can make a difference.

**Subject-specific needs**

Some disciplines are clearly more translatable to online teaching and learning than others. There are specific challenges in both teaching and assessment with subjects that require lab work or physical interaction such as the performing arts.

**Staff wellbeing**

University staff have been under intense pressure for a number of months and some have faced the prospect of summer breaks spent redesigning courses as well as uncertainty around of what the new academic year may bring.

**Student digital skills**

“Sadly, the narrative that we often hear around the digital fluency of students is frankly, a load of nonsense. It’s just not true. It’s all very well using your thumbs very quickly to type a message or to use three apps to death. That does
not translate into a focused, effective approach to learning using digital tools."
Alejandro Armellini, dean of learning and teaching, University of Northampton

Students’ digital and online study skills vary. According to the Jisc 2019-20 student digital insights survey of more than 20,000 higher education students, only a third describe themselves as ‘very confident’ in trying new technologies and nearly a third described as ‘average’ the quality of support they received from their university to develop their digital skills. As more learning moves online, there is also a need for greater awareness of online safety and security.

Digital inclusion and equality
The digital divide in respect of access to devices away from campus has been widely discussed, with many universities making provision through laptop loans or bursaries for students with access to only a shared laptop or a mobile phone. However, beyond hardware, connectivity and remote access to specialist software (and the computing power to run it effectively) also present challenges.

Accessibility
The digital shift offers an opportunity as well as a challenge when it comes to accessibility: the chance to better meet the needs of a diverse student population, address accessibility requirements and ensure that content is well-designed, understandable, flexible and robust.

Student wellbeing
According to recent Pearson/WonkHE research, 41% of students surveyed said they had struggled to manage their wellbeing in the absence of face-to-face engagement with friends, peers and lecturing staff. 34% said that learning in a new way and format had been challenging, and 34% said they were struggling with managing their own time and schedule in the absence of a campus-taught timetable. 29% said they found isolation difficult. However, when asked what universities need to do to meet expectations for next term, 59% chose “high-quality online teaching” as the most important area to tackle.

Student engagement
“The lecture as a one-hour exposition is not viable and what we’re trying to do with staff is to get them to break up lecture content into small bite-sized chunks and then, as a stimulus to further reading, discussion and reflection, to aim for five, 10 minutes maximum around threshold concepts, and build in exercises around that. Break it up with small group and individual reflections using polling, quizzing and that sort of thing, rather than just doing the traditional one-hour stand-up regurgitation of ideas.”
Richard Walker, head of programme design and learning technology, University of York

Keeping students engaged and motivated is a challenge that touches on others, including learning design, building community, wellbeing and digital inclusion.

Demonstrating value for money
Although MPs concluded that there should not be a universal refund or reimbursement of tuition fees to all university students, following a request from the National Union of Students and a petition to reimburse all students for this year’s fees that gained more than 300,000 signatures, there is a clear imperative to show that digital learning is of equal value to campus-based teaching and learning.
PART 2: The vision – towards 2030

Summary

In the aftermath of Covid-19, as the shift towards ubiquitous digital teaching and learning becomes all but inevitable, the HE sector faces a fork in the road: treat digital learning as a poor cousin of the current model, with a ‘lift-and-shift’ approach to moving existing content online – or make the strategic choice to approach this as an opportunity to rethink, redesign and improve the way learning happens within universities.

We believe that to make the most of its potential, by 2030 digital learning in HE must meet three requirements. It needs to be intentional, delivering a learning experience that is built strategically to improve on current practice; seamless, with a reliable, coherent and integrated foundation; and supportive, designed to help every student make the most of it no matter their location or background. This vision does not mean that all learning must happen online. Our overarching goal is to demonstrate how digital learning can improve the university model no matter the mode of delivery, and what needs to be true for this to happen.
The transformational change that was forced on the sector by Covid-19 offers university leaders an opportunity to take the strategic decision to make a break with the past and to improve the learning experience and outcomes for all students. This will not be achieved by moving all learning online. Instead, a strategy that makes good use of digital technology will build on the momentum of spring 2020 to create resilience within the system. A digitally resilient university will be flexible and fluid, enabling teachers to adopt a range of ways to interact with students and opening up new pathways for learners that do not presuppose a particular way of ‘going to university’. Instead, students will enjoy the choice of ‘pace and place’ of learning within a system that is proactively designed to best meet their needs and adapt to individual circumstances. Digital technology must put learners and teachers centre stage.

**Intentional**

Digital learning is an opportunity to rethink the way we design and deliver university courses from the ground up. Many universities will aim to provide a parity of experience to all students, whether they study online or in person, locally or from abroad. Students, in turn, will benefit from a greater choice of pace and place of learning.

**Seamless**

A systemic approach to digital learning will help to break down the silos between different tools, adopting instead an ecosystem-based approach. Emphasising the importance of an intuitive and consistent experience (alongside reliability and security) will enable students and staff to make the most of the promise of digital learning.

**Supportive**

The wide adoption of digital learning will mean that our ideas of what it means to belong to a university community will need to be reconsidered. Personalised and proactive, digital learning will help build and nurture lifelong relationships for both students and staff but they will also need support to develop the digital skills, confidence and resilience required to succeed in the new environment.

---

**Digital learning in 2030 must be... intentional**

The transformational change that was forced on the sector by Covid-19 offers university leaders an opportunity to take the strategic decision to make a break with the past and to improve the learning experience and outcomes for all students. This will not be achieved by moving all learning online. Instead, a strategy that makes good use of digital technology will build on the momentum of spring 2020 to create resilience within the system. A digitally resilient university will be flexible and fluid, enabling teachers to adopt a range of ways to interact with students and opening up new pathways for learners that do not presuppose a particular way of ‘going to university’. Instead, students will enjoy the choice of ‘pace and place’ of learning within a system that is proactively designed to best meet their needs and adapt to individual circumstances. Digital technology must put learners and teachers centre stage.
Mindful design and delivery

As the case studies in this paper show, universities acted rapidly and with a real sense of purpose to move delivery online this spring. No one believes this was an example of best practice. A period of reflection will follow. The need for digital resilience will force a more mindful approach to the design and delivery of courses, which will become the hallmark of universities over the next decade. When it comes to digital learning, ‘we have always done it this way’ is no longer an option. Instead, we will see a greater focus on pedagogy, which takes into account the need to use digital tools in ways that are truly engaging, and on using data to inform decisions about how to improve teaching and learning.

Digital tools (from basic lecture capture to courses redesigned from the ground up) will help the development of a culture of feedback and self-reflection. Preparing learning materials that cannot count on a captive audience for engagement forces a reckoning with what it means to be a good teacher. And as we rethink the student experience in the age of digital learning, we will be constantly reminded that the staff experience of digital learning matters, too.

Flexibility and resilience

Ubiquitous digital learning is an opportunity to break down the barriers of the age-old university model. All too often, at least in the popular imagination, the traditional campus-based university exists as a kind of colony of eighteen to 21-year-olds, set in the middle of a complex local environment but separate from it. This image does not reflect the whole truth, but barriers to entry for underrepresented students, as we know, can be considerable – commuters, carers, parents, part-timers will often struggle to fit in and be part of the community.

Digital learning can unlock for these students the choice of pace and place of learning that is the best fit for their own circumstances and that does not compromise on their status within the university. Flexibility and agility will be at the heart of the system, so that students can be much more intentional about their digital learning path.

However, it would be a mistake to see digital learning through the lens of a zero-sum game where one approach wins at the expense of the alternatives. Even before the Covid-19 crisis, there was growing recognition of the benefits of blended learning, which while not impossible without the use of digital tools, is much more scalable with them. The next step will be a move towards mode-free education that moves seamlessly between online, hybrid or blended learning, and face-to-face learning as and when needed. To address the diverse needs of their students, universities will make it possible to not just switch between modes from one year to the next, but to combine them freely. The result will be a parity of experience for all students, whether on campus, off campus or on the other side of the world.

At the other extreme, digital resilience means giving students the ability to learn – without losing out on quality – with no digital tools at all. Imagine that the next shock to the system, instead of a pandemic that pushes everyone online, is a total
loss of internet connectivity. Paradoxically, the changes required to develop digital learning fit for 2030 should also prepare us to deal with a scenario like this.

**Collaborative by default**

This transformation will accelerate the changes already underway in how university staff interact with each other, their students and the wider world. One example might be collaboration with employers, which is, today, difficult to achieve at scale. With digital platforms that aggregate collaboration opportunities – for example, digital skills courses co-designed with corporate partners – mass collaboration will be possible, creating genuine engagement with practice.

Digital tools will also unlock new ways to communicate and collaborate with colleagues, whether within one’s own institution or at other universities. Effective communication was key to universities’ ability to deal with the Covid-19 crisis and we expect that many in the sector will take these lessons to heart. Most of all, the move to digital learning should be a collective endeavour with students – as the saying goes, replacing the ‘sage on the stage’ with ‘a guide on the side’. The digital curriculum is an opportunity to encourage inquiry-led learning that is shaped by the students as much as the pedagogic and subject expertise of the teacher – and this includes student participation in curriculum design.

**Digital learning in 2030 must be... seamless**

Digital tools have been used to support teaching and learning for decades now, in many cases with great outcomes. However, the experience of using those tools has been anything but seamless. The consequences are significant. When staff and learners are frustrated by a mess of different systems and interfaces, jumping through hoops to move between them, engagement plummets. When data sits in silos, opportunities to improve and iterate are left on the table, problems go undetected and there are considerable security risks. A systemic approach is required – a solid and reliable foundation that creates a consistent and intuitive experience for all users.

**A data-savvy ecosystem**

Over the next decade, we expect universities to move away from relying solely on a few large and unwieldy legacy systems. Adopting an ecosystem-based approach, they will take advantage of a range of interconnected tools, each addressing specific use cases relevant to the individual university. The consolidation of data from these tools will inform a new generation of learner analytics. Today, effective use of learner analytics can be hampered by data sitting in silos across systems large and small. With that barrier removed, data will inform decisions on better course design, support staff professional development and help build up a more complete picture of individual learners’ achievements and progress.
Over the past decade, the growing demand for higher education has been met through the expansion of on-campus teaching or the introduction of MOOCs. The former is usually a more rounded experience for the student but scaling it can lead to a ‘one size fits all’ instructional approach. The latter is more flexible for the student but risks leaving them without a network of support. In our vision for 2030, digital learning is an opportunity to create a supportive environment that is nonetheless interactive and engaging for all students.

**A delightful experience**

Not long ago, universities were places where students discovered new technology – including personal computing – for themselves. Those days may be past but there is no reason higher education can’t tackle its reputation for clunky and confusing digital learning environments. Over the next decade, there will be a much greater focus on creating a user experience that is coherent, logical and on par with learners’ everyday digital lives.

It may be tempting to try to predict what kinds of technology users will encounter in 2030 – mobile-first, virtual reality, Netflix-style playlists have all featured in this context. Recent history teaches us that the pace of technological development can render predictions of this kind moot. Instead, the goal should be to create an intuitive experience – one that is familiar to the students of 2030, whoever they might be. This will require flexible thinking, a focus on user expectations and an openness to partnering with innovative companies that are in tune with generational changes.

**Reliable and secure**

As digital learning becomes a core part of the university experience, not an alternative or add-on, the reliability of IT systems will be as much of a priority as building maintenance. When it comes to the campus of 2030, the digital component will matter as much as the physical. This, in turn, requires a shift in thinking away from crisis management to planning over the long-term. Digital systems will need to be resourced appropriately, reflecting their changing role within the university and the different needs of individual subject areas. Excellent data privacy and security practices will be a fundamental requirement for all elements of the digital ecosystem.

**Digital learning in 2030 must be... supportive**

Over the past decade, the growing demand for higher education has been met through the expansion of on-campus teaching or the introduction of MOOCs. The former is usually a more rounded experience for the student but scaling it can lead to a ‘one size fits all’ instructional approach. The latter is more flexible for the student but risks leaving them without a network of support. In our vision for 2030, digital learning is an opportunity to create a supportive environment that is nonetheless interactive and engaging for all students.

**Personalised and proactive**

Personalisation has long been the holy grail of education technology. Effective personalised learning will be crucial to the intentional experience of digital learning, but it is also key to a genuinely supportive learning environment for each student.
Personalised digital learning will be proactive in meeting student needs. It may provide a tailored approach to the development of skills or use data about students’ progress to present them with recommendations for content they may have missed. The result of this will be a learning path that adapts to individual circumstances, helping students stay on track and succeed.

More importantly, the wider adoption of digital learning by 2030 will lead to a rejection of a purely instructional attitude to learning. To be effective and to engage students, digital learning will need to be interactive. Underpinned by a growing range of well-designed apps and tools, this change will follow from the shift to mode-free delivery. A growing body of evidence shows how important engagement and interactivity are to digital learning, and building on this evidence will be necessary to make learning resilient to the next shock. This will require a much greater degree of proactivity – if you cannot count on students attending a lecture, you have to meet them where they are instead.

**A community on and off the campus**

One of the challenges of digital learning will be creating a strong sense of belonging to a single community for all students. Accessible and inclusive, this community is necessary if students are not to be left behind – especially those who may not fit the ‘traditional’ profile. This will require universities to rethink current views of presence and participation. If your learning experience means you never have to set foot on campus, what does it mean to be part of the university community? The specifics will vary across different institutions, but the relationships that students develop with each other and their teachers are core to the university experience. Digital learning in 2030 will focus on building and nurturing these relationships so that they always have a support structure to fall back on.

For many universities, this will mean taking another look at the role of the campus and getting the most value out of their estates. Some universities, such as Northampton, are already traveling along this path. Others will follow, finding their own answers to what laboratory and field work might look like in combination with digital learning. Some will look at providing virtual reality labs, such as Arizona State University; or follow in the footsteps of the Open University, with remote-access experiments and instruments controlled over the internet.

**Establishing a common baseline**

The lockdown gave us a stark lesson in the massive disparity in access to many of the prerequisites of effective digital learning, from laptops to study spaces. To avoid this in the future, digital learning will require a common baseline that can be established among students and staff, and support them in reaching it. Some of this will have to do with hardware or broadband access, building on the experience of the pandemic. It will also mean accurately assessing the digital skills of students (of all ages) and staff, without making assumptions about the relationship between age and digital competencies. Universities will create an environment that supports the development of the necessary skills along with the confidence and resilience needed to make the most of the promise of digital learning.
Where does 2020’s experience take us?

“Ultimately, it’s about shifting our mindset. We can do great things in different ways, not just in the ways that we’re used to. I recognise that nurses and doctors need some face-to-face training. I recognise engineers and architects need elements in the lab. So do bio scientists. But many other things can be done differently. And even those things that are protected territory for face-to-face, with a bit of creativity a lot of those could really shift and become much more flexible, much more accessible, much more open to others. It is those lessons that we need to focus on and retain as part of the mainstream beyond Covid.”

Alejandro Armellini, dean of learning and teaching, University of Northampton
The fixes explored in the case studies in part one were an emergency response to a crisis like no other. However, we can already see the relative movement towards the three principles outlined in the previous section:

<table>
<thead>
<tr>
<th>MORE</th>
<th>Coventry University</th>
<th>University of York</th>
<th>University of Lincoln</th>
<th>University of Leeds</th>
<th>University of the West of Scotland</th>
</tr>
</thead>
<tbody>
<tr>
<td>LESS</td>
<td>University of Northampton</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- Intentional
- Seamless
- Supportive

---

**INSIGHT FOR STARTUPS**

“I can’t engage with a company that’s not able to demonstrate enterprise-level capabilities. Startups need to have a greater level of understanding of the sophistication of the businesses they are talking to. We’re a massive organisation with massive infrastructure. We’re not going to just plug in some unproven piece of technology because it might solve one small problem. It’s just not worth our effort.”

Neil Morris, University of Leeds
How will the disruptive events of spring 2020 change the way universities approach digital learning in the longer term and, perhaps, move the sector closer to the 2030 vision of digital learning becoming more intentional, seamless and supportive?

As well as providing enforced acceleration and momentum, the emergency period highlighted the need for all universities to get three key areas right: learning design, digital capabilities and digital inclusion. It is progress in these three areas that will determine how far and how fast the sector moves towards the 2030 vision.

“The move to a more flexible approach to learning experiences for university students has been a long time coming in the UK. Covid has simply accelerated something we already knew was crucial to make that flexible future possible: thoughtful transformation of learning from chalk and talk to an experience that is community-centred and focused on active pedagogical approaches. To get there we need a combination of learning design expertise and technology platforms that enable our pedagogies, not ones that we have to work around!”

Andrew Turner, associate PVC for teaching and learning, Coventry University

Learning design

Learning design is central to good digital learning. As we saw with the University of Northampton and its active blended learning approach, or the University of Coventry’s module redesign, it makes the difference between simply transporting learning and transforming it.

“I’ve heard a lot from universities over the summer about how ‘we’ve cracked online learning’ and ‘we showed we were agile, moving so quickly’. I don’t think what we’ve seen across the sector really does justice to properly designed online learning. Just dumping materials online and running a few seminars doesn’t cut it. It needs far more purposeful, thoughtful design, with attention to those active learning principles, but done in a more flexible fashion. When I talk about purposeful design, it involves rethinking, rather than repurposing or recycling previous lectures.”

Richard Walker, head of programme design and learning technology, University of York

That purposeful design will go some way to solving some of the other challenges facing universities in this space. Student engagement is likely to be enhanced by closer interaction with tutors, small group teaching and team work, and short and snappy chunks of content rather than ‘death by Zoom lecture’.

And if that is true for digital learning, it has profound consequences for the design of face-to-face learning, if a course is to be truly blended and capable of shifting from offline to online and vice versa in response to changing external pressures such as pandemics and other influences.

Online community building is also critical and takes time and effort, as Coventry’s partnership with Aula has shown, but, again, can be purposefully developed through good pedagogy and technology. Authentic, relevant,
adaptable and trustworthy assessment is another vital part of the picture.

**Digital capabilities and confidence**

However, this purposeful, engaging learning relies on the digital capabilities and confidence of the staff who design and deliver it. From a low starting point (three-quarters of teaching staff had never taught in a live online environment or given digital feedback, pre-lockdown – Jisc), the sector has taken a huge leap forward in the past few months, as Neil Morris, dean of education at the University of Leeds, explains:

> “Everybody has done a very rapid digital literacy, digital capability training programme through practice, so now they’re ready to think about what education could look like if we were going to be imaginative and we’ve got the skills available to us. The opportunity is a massive step forward in digital transformation of the education sector, across the sector, for all levels.”

However, the digital crash courses of spring/summer 2020 alone are not enough to create insightful course designers. The digital upskilling will need to continue or increase in the months to come, supported by an ongoing, in-depth training and development programme to ensure that digital skills and confidence are raised and imbued through the whole institution – including at the very top – rather than in isolated pockets of practice in departments.

A major challenge for the next year or two (at least) is the delivery of quality, well-designed learning, particularly to the 2020/21 cohort, who are already nervous of whether digital or blended learning will deliver the same value as traditional face-to-face learning, while still acquiring the long-term skills and confidence to devise such learning.

**Digital equality and inclusion**

During lockdown, the digital divides between students became much more stark. Without university provision of hardware, software and connectivity, some students struggled to complete work on mobile phones with restricted data limits.

Universities made great efforts to identify which students needed extra support and supply equipment or funds to them where possible. This needs to go further in the new academic year, as Richard Walker, head of programme design and learning technology, University of York, sets out:

> “For fully online, distance programmes, there’s already a minimum specification of tech requirements. That’s in the student contract. But where offers have already been made for campus-based courses, there has been no minimum tech requirement so we need now to clearly articulate what students need and, if they don’t have that tech, we need ways to supply it to them, or think about redesigning, repurposing resources so that we provide equitable access to all. That work is going on now.”

While the requirements in some courses may be unavoidable, such as the high computing power and specialist software needed for certain STEM or media applications, learning design, including mobile-first policies, has a role to play in supporting digital inclusion and ensuring that resources are accessible, meeting the needs of all students.
Digital learning market map

In the market map below, we have identified some of the leading startup players that are set to shape the future of digital learning and deliver an experience that is seamless, intentional and supportive.

Specifically, the vertical axis reflects whether each startup solution is ‘core’ to the delivery of digital learning in line with the three identified principles, or if it is a ‘supplementary’ offering that adds value as part of the end-to-end digital learning experience. Along the horizontal axis, we have highlighted whether each solution can only be applied for specific subjects or can be applied agnostically to any subject.
**Insights for startups**

<table>
<thead>
<tr>
<th>Observation</th>
<th>Implication</th>
</tr>
</thead>
<tbody>
<tr>
<td>Universities are in a state of flux and transition with digital learning. How they responded to spring/summer 2020 may not be carried through to autumn 2020 and beyond. The picture also varies widely across the sector with a few innovators and a long tail catching up.</td>
<td>If startups are prepared to listen and to understand deeply the shift that universities are making, the challenges they face and the constraints they are under, they can build the relationships that result in universities feeling more comfortable experimenting with new products.</td>
</tr>
<tr>
<td>Universities are under pressure to scale up digital learning quickly in a context of uncertainty around on-campus delivery in 2020/21 and to demonstrate value for money and student experience.</td>
<td>Startups can offer pace and agility but partnership and co-creation are key.</td>
</tr>
<tr>
<td>Digital inequalities in the student body have come to the fore in this emergency period and encompass not just access to laptops but also connectivity, data and specialist software.</td>
<td>Startups can help by ensuring their solutions acknowledge students’ differing access to technology off-campus, for example with a mobile-first approach or ensuring offline accessibility.</td>
</tr>
<tr>
<td>Universities are already using a patchwork of products and platforms. Onboarding a new tool is not necessarily a trivial matter, particularly when staff upskilling, already a major challenge with existing tools, will be required.</td>
<td>“Startups need to think about how their product integrates with existing key systems. Rather than trying to replace or replicate the VLE, startups need to think about how we build in seamless integration, thinking about accessibility and usability features.” Richard Walker, University of York</td>
</tr>
<tr>
<td>Just as one size does not fit all across universities, there is diversity and complexity across disciplines. Digital learning makes very different demands of products in the performing arts and quantum physics, for example.</td>
<td>There is a real opportunity here for startups to set themselves apart by having a deeper understanding of the subtleties of domain diversity in order to offer solutions to these very specific challenges.</td>
</tr>
</tbody>
</table>
Q&A with Rachael Curzons, chief partnership officer, Aula

Aula is the learning experience platform (LXP) for higher education. Aula’s platform makes it easy for academics to create high quality hybrid learning experiences that are community-centred and embed active learning approaches.

What do you see as the learning design implications of the shift to digital we’ve been going through since March?

Firstly, you need to build purposeful opportunities for community creation into the learning experience. That will not come from the organic campus activities in September. Students have to be able to develop a sense of connection with one another, and indeed with the institution, through the learning experience itself.

You also have to intentionally design both synchronous and asynchronous active learning into the experience. In many ways this is the trickiest aspect, as its structure should be very different to the two-hour lecture, two-hour seminar model many academics are used to.

Finally, students need to feel that the learning experience is highly relevant to their chosen field of study or profession. It doesn’t have to be as complex as securing remote work experiences, it can be as simple as making sure that the digital tools that you’re asking students to use are industry ready.

What about digital inclusion?

Our learning design process combines synchronous and asynchronous learning experiences so that students are able to access learning regardless; they may have caring responsibilities, or employment, that necessitates this flexibility, which is to be embraced and celebrated.

The learning platform is also mobile-first, which means that a student who has to share a laptop with other family members, for example, can continue their learning from their phone.

What is your experience of the digital skills, capabilities and confidence of staff?

We have a team that works almost exclusively on supporting change in institutions because, in practice, the technology alone will not necessarily have the desired impact without a really thoughtful change journey built in.

To ensure that everybody involved in the change or the transformation is at least accepting, if not excited by, the sense of urgency and the vision, you have to create a narrative around that vision. It needs to set out the concrete, positive outcomes for academics and students. We build academics’ understanding of how developing community, and using active learning approaches, can clearly drive benefits for their students, whether it’s around retention, student
satisfaction or achievement. Once this is underway, they are always excited by the results but it takes careful communications to ease that journey.

We’re transforming 1,200 modules for Coventry University, 300 first-year modules for UWS and working with others, too, for September. We need to make sure that their students are going to receive a high-quality hybrid learning experience without academics spending every single day of their summer break designing it. And so the process itself requires only eight hours of an academic’s time in order to get the module up and running. Then our learning designers take care of the rest. The process is developmental for academics and they can access further pedagogical support 24/7 once their teaching begins.

What have you learned about digital community building from your work with universities?

It’s all about being really purposeful and intentional in the design of both the technology and the community. You need to ensure that, within your product, the barriers between humans are as low as possible – the ability for me to access other users has to be almost immediate. One of Aula’s design principles is that you should never be more than one click away from another human. In addition, when you land in the platform, you always land in the community, which feels much more like walking into a classroom than the VLE!

Much time is designed in at the beginning of modules on building up community, from synchronous introduction sessions in small groups through to asynchronous introductions using tools like Padlet, a kind of digital noticeboard. A huge number of asynchronous and synchronous touch points are needed to continually develop that community, and teacher presence and peer-to-peer engagement are core activities we try to encourage academics to build in with students.

What advice would you give to a startup in this space?

We’re in the middle of a shift in mindset – and universities are, in this moment, very open to discussion. Find ways to meet universities where they are, while also constructively challenging the status quo. Take a pilot approach and a partnership approach. You will learn so much from and about the institution (and your product) when you partner with the right institutions.

You have to spend time getting to know who that institution is, what their problems are, what they’ve tried in the past and how they envision change happening in the future. It’s not a market that you can just blast your brand through. Most importantly, being focused on educational outcomes is crucial. Whether that is students’ time, so they can focus on their learning, or helping academics speed up their marking so they can focus on student support, spending time understanding what outcomes your users care about is of the utmost importance.
Acknowledgements

Emerge Education and Jisc would like to thank all the contributors to this report for their time and expert insight. In particular, we would like to thank the members of the Jisc – Emerge Education advisory board on digital learning, led by Ian Dunn and Gideon Shimshon, and everyone who so kindly spared the time to be interviewed for a case study during an exceptionally busy time for all involved in higher education. Thank you.

Alejandro Armellini, dean of learning and teaching, University of Northampton
Andy Beggan, dean of digital education, University of Lincoln
Rachael Curzons, chief partnership officer, Aula
Guy Daly, deputy vice-chancellor (education and students), Coventry University
Ian Dunn, provost, Coventry University
Lucy Meredith, vice-principal of learning, teaching and students, University of the West of Scotland
Neil Morris, dean of digital education, University of Leeds
Gideon Shimshon, associate principal digital learning and director of QM Online at Queen Mary University of London
Andrew Turner, associate PVC for teaching and learning, Coventry University
Richard Walker, head of programme design and learning technology, University of York
Paul Bailey, head of co-design, Jisc
Louisa Dale, director of insight, Jisc
All participants at the Learning and teaching reimagined HE leaders roundtable

Thank you to report sponsor, Aula

The content of this report is independent of any particular solution provider

Authors and editorial team

Alexander Iosad, head of engagement, Emerge Education
Michelle Pauli, Michelle Pauli Editorial

Design by Stoats & Weasels
About Emerge

Emerge Education is a European seed fund investing in exceptional founders who are solving the $8.5tn skills gap. Emerge is backed by strategics such as Cambridge University Press, Cambridge Assessment and Jisc, as well as founders/investors of Trilogy and 2u. The team has a solid track record with 50+ investments, with those companies raising £100m+ from investors such as Local Globe, Stride, Project A, Rethink Education, Learn Capital and Reach Capital. Emerge also convenes Edge, a series of thought leadership forums for higher education and corporate leaders working on addressing the skills gap in their organisations and beyond. Through Edge, Emerge is able to help founders gain unique customer insights and build defining business partnerships that help their companies grow faster.

About Jisc

Jisc is a not-for-profit providing the UK’s national research and education network (NREN), Janet, and technology solutions for its members – colleges, universities and research organisations. It is funded by the UK higher and further education and research funding bodies and member institutions.

Emerge Education
15 Fetter Lane
London
EC4A 1BW

info@emerge.education
emerge.education
@emergelab

Jisc
4 Portwall Lane
Bristol
BS1 6NB

info@jisc.ac.uk
jisc.ac.uk
@Jisc

August 2020