

## The Impact of Good Practice in Digital Delivery on Student Engagement, Progression and Achievement

COVID-19 Support and Guidance

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### Focus of the paper

In February, QAA published an early exploration of the ways in which <u>good practice in digital</u> <u>delivery and assessment affected student engagement and success</u>. That paper identified some initial qualitative evidence of the positive impact of good practice in digital pedagogy. The current paper continues the exploration, building a more extensive evidence base. This paper includes both a sector and a provider perspective. At a sector level, we look at a range of student surveys produced since spring 2020 to identify broad trends in student satisfaction with digital provision and highlight aspects of delivery that surveys suggest have had a positive effect. To provide an institutional perspective, we are able to draw on six individual provider case studies as well as the findings from semi-structured discussions with a wider range of providers. This evidence base enables us to present indicators of alignment between good practice in digital or blended pedagogy and improved student engagement, progression and achievement.

# Sector perspective: student views of their learning experience during the pandemic

Higher education providers have gone through several phases of delivery in the year since the first UK lockdown. The emergency shift to fully remote provision in March 2020 was followed by a period of intense planning for a mix of digital and in-person delivery in the first term of 2020-21. This was interrupted by the second national lockdown in November 2020, when some courses were forced to change to fully remote delivery, and then by the third lockdown of January 2021, when most in-person teaching had to stop. In addition, more local measures to counteract the spread of COVID-19 in particular geographical areas placed further restrictions on campus access for many providers and their students.

Throughout this time, a range of surveys of student opinion were conducted to consider aspects including mental health, financial situation, living arrangements and academic experience. The outcomes of these surveys give some indication of how the student experience of digital provision changed between the delivery phases, which aspects students found to be positive and what they identified as challenges.

Despite the difficult circumstances of this academic year, there are many positive messages:

- Efforts to address digital poverty have helped to establish a more level playing field for all students as learning activities moved online, including through investment in devices and internet access.
- Routine availability of materials (such as lecture recordings) for students to revisit in their own time has been well received and students expect this to continue.
- Students who had the chance to experience enhancements, such as active use of online discussion forums, interactive quizzes or games, digital coursework submission and small group assignments, and provision of well-structured and supported short videos, had a positive view of digital delivery, suggesting a need for a concerted and consistent effort to provide such opportunities.

It is evident from the survey outcomes that there is a strong relationship between the academic experience and the broader circumstances of student life, such as unprecedented social isolation and mental health pressures which students identified had heightened in the pandemic. These features, in turn, significantly affect students' academic engagement and performance, as well as students' views of their overall experience. Nonetheless, the survey questions exploring the learning, teaching, and assessment practices are a useful indicator of the positive aspects of emergency digital provision during the pandemic.

In general, the survey outcomes indicate that student satisfaction with the quality of digital delivery was greater in November than in March 2020.<sup>1</sup> This suggests that the more systematic approach to course redesign over the summer break, and the rapidly developing experience of digital learning, teaching and assessment, led to higher levels of student satisfaction in 2020-21. This is also evident in the <u>case studies</u> we have gathered to accompany this paper (accessible to QAA Members on the Membership Resources site). While we should be cautious about making firm comparisons across surveys with different methodologies and groups of respondents, it is interesting to note that, in June 2020, 15% of respondents to <u>an NUS survey</u> reported they were not able to gain sufficient access to online learning, while the <u>Jisc survey</u> (published in March 2021) showed this had improved with only 6% reporting similar challenges by November. Improved access to lecture recordings and other ways for students to revisit learning material in their own time has been well received, and most students (over 80% in a <u>Wonkhe/Pearson December survey</u>) believe these practices should continue after the pandemic.

Across a range of surveys, approximately a third of students reported some level of dissatisfaction with the emergency model of digital learning.<sup>2</sup> It is possible that this outcome is linked to the numerous disruptions students have experienced since March 2020 and, in particular, to students reporting they experienced fewer of the co-curricular or wider aspects of an 'in-person' student experience. It should be noted that this figure represents an aggregate for the sector, it does not reflect differences in digital delivery and assessment between providers or between different courses at the same provider. It is also important to recognise that, while some features of digital delivery during the pandemic were widespread, such as live online lectures, discussion forums, and video seminars, many survey respondents had limited experience of other pedagogical approaches. This led to a high proportion of 'don't know', 'neutral', and 'neither agree nor disagree responses' within the surveys. When those responses are excluded, positive reactions to digital delivery outnumber negative ones.<sup>3</sup> That is, student satisfaction appears correlated with their experience of enhanced digital delivery practices. When students have the opportunity to experience different forms of enhanced digital delivery, they find them to be a positive addition to their experience and express a desire for those practices, in some form, to continue in the future.

<sup>&</sup>lt;sup>1</sup> Survey results for 2019-20 include findings that 42% of respondents were very or somewhat satisfied by online learning in a <u>June HEPI/YouthSight poll</u>; 37% of responses rating the transition to online as 7 or more out of 10 in a survey; and 55% of respondents to <u>a NUS survey</u> agreed provision was of a good standard. By November, 59% of undergraduates were happy with the quality of provision <u>according to HEPI</u> while polling for the <u>Office for Students review of digital learning</u> showed a net 67% satisfaction with digital teaching and learning. Similarly, a <u>Jisc survey</u> found that only 11% rated online learning as poor or worse.

<sup>&</sup>lt;sup>2</sup> 29% in the <u>ONS experimental data set</u> from November, rising to 37% in <u>a January survey</u>; 34% in the <u>second</u> <u>Wonkhe/Pearson survey</u>; HEPI <u>saw a lower figure</u> of 23%. In the <u>OfS survey</u>, 29% stated they do not believe *any* aspects of their courses should be delivered online after the pandemic.

<sup>&</sup>lt;sup>3</sup> The only aspects of digital delivery that more than half of students who experienced them did not wish to see continued in the <u>Wonkhe/Pearson survey</u> from November were virtual labs and placements. However, it is worth noting that few students have experienced either, with <u>the OfS survey</u> putting those who did at 12% and 6% of respondents, respectively.

Positive learning and teaching practices identified in the surveys include:

- the use of online discussion forums
- digital coursework submissions and group tasks
- interactive quizzes or games
- provision of well-structured and scaffolded series of short videos.

Respondents across a range of surveys praised the amount of support they received from staff and the ways in which they were able to incorporate elements of groupwork and interactive tasks, particularly in smaller breakout sessions. Conversely, the key 'negative' aspects that the less satisfied students pointed to were a lack of social interaction and practical experiences.

The survey data suggest good practice in digital delivery is associated with:

- consistency of approach in course design, pedagogy and workload
- opportunities for direct interaction with teaching staff to build relationships and receive support
- an appropriate mix of hands-on practical experience (where possible) supplemented by digital tools that students can use to practice in their own time
- a social and interactive academic experience for students.

To better understand the specific practices in digital delivery and assessment that have delivered on these expectations, we have collected several individual provider case studies.

### **Provider perspective: the impact of good digital practice**

While case studies can only capture a snapshot of practice across the sector, the examples collected for this paper surface many of the same themes that emerged from the sector survey data. Together, these provide an early evidence base for the benefits of digital delivery and assessment to student engagement, progression and attainment.

This section is structured around the features of good practice in digital delivery identified from the case studies and sector survey outcomes:

- Consistency of approach: a **pedagogy-led approach** to the design of digital delivery helps ensure a consistent experience for students that sets clear expectations and provides supportive scaffolding to their learning. The benefits are evident both where this is at the initiative of individual members of staff and where this is supported at provider level and centrally coordinated. In the latter case, when the redesign is led institutionally and framed by an overall strategic approach to digital teaching and learning, the positive impact is consistently replicated across different schools and departments, not only a single course or module.
- Opportunities for direct interaction with teaching staff: the inclusion of student support as a requirement of a scaffolded active learning approach, combined with increased awareness of the need to provide proactive support in the challenging current environment, means that **students have had new opportunities to interact with tutors and lecturers** and build stronger relationships with them.
- An appropriate mix of hands-on practical experience supplemented by digital tools: despite obvious challenges in translating practical experience to the digital environment, the translation of some practical course components to remote

delivery **benefited students by giving them more time and space to reflect on course materials, revise and practice**.

 A social and interactive academic experience: digital delivery offered new opportunities for collaboration between students across year groups as well as with other providers and employers, especially on practical courses, where shared digital learning spaces have been set up to build new communities of practice.

# Pedagogy-led approaches to course design create a consistent experience

The shift to digital delivery prompted a rethinking of the approach to course design across the sector. Mindful of student workloads and the need for social interaction, providers turned to known pedagogic techniques that support forward planning and integrate a variety of interactive tasks which help maintain engagement. In some cases, this meant building on techniques providers were already using prior to the pandemic; in other cases, it involved finding good practice established elsewhere. The result was a more **consistent and structured approach** to course design and delivery.

At the University of Edinburgh, the redesign of an honours-level module allowed for a comparison of student results between the 2020-21 academic year and pre-pandemic cohorts. Two hours of lecture and one hour of tutorial/practical work per week were replaced with a series of activities interspersed with short 10-minute videos, combined with exercises and questions for group discussion supported by discussion boards and weekly synchronous Q&A sessions. Following the <u>ABC course design framework</u> (an approach to course design developed by University College London), the module covered a variety of tasks and assessments linked to learning outcomes, mapped out (ahead of the semester start) week-by-week for consistent scaffolding. Students found the new format engaging and enjoyable. Remarkably, although the number of low marks was higher than in previous years (not unexpected given the challenging circumstances students found themselves in), the higher-achieving students' performance was as good or better than previous years.

## Examples of student feedback on the University of Edinburgh redesigned module

'I like the shorter lectures accompanied by activities! I feel like it helps me engage with what we're learning.'

'I really enjoy the format - short, concise lectures followed by materials to exemplify phenomena/practice relevant data sets. It's really helpful!'

Other examples of pedagogy-led, digital course design's positive impact at course level can be found among the winners of <u>student-led teaching awards at Scottish providers</u> which predate the pandemic. At the University of the Highlands and Islands, a similar approach to that of the Edinburgh module was taken for a history course. Lecture content was broken into shorter blocks of 10-15 minutes interspersed with interactive tasks, using digital quiz platforms encouraging friendly student competition as well as group tasks. Students were able to choose the mode of interaction with which they were most comfortable. The benefits of the approach were recognised when the lecturer was highly commended in the 2019-20 most engaging tutor category. Another student award, at the University of Stirling, recognised the application of the <u>5E Instructional Model</u> to initial teacher education, with a consistent week-by-week course plan supporting a gradual transition from guided to independent learning.

Some providers were able to implement specific pedagogical approaches at scale across the institution, building on experience prior to the pandemic.

At the University of Northampton, curriculum design prior to the pandemic was already guided by the provider's digitally-rich Active Blended Learning (ABL) and Active Distance Learning (ADL) approach, easing the transition to hybrid and remote delivery. ABL/ADL emphasises the use of technologies for effective collaboration through shared platforms, online communities, live and recorded webinars, and interactive digital tools. The approach combines sense-making activities with focused and engaging interactions in small groups, in synchronous and asynchronous digital learning settings.

Its impact can be illustrated by data from a compulsory Level 6, 20-credit 'Critical Issues in Physical Education' module delivered entirely online between October 2020 and January 2021. The adoption of ADL saw improvements to student evaluations of the module compared to previous years. Moreover, although a group presentation assessment requiring collaboration and planning had to be carried out online in full, the average grade in 2021 was higher than 2019-20 (while the median grade was the same in both years). Thus, digital delivery underpinned by a supportive pedagogical framework was beneficial to students' interaction, engagement and attainment.

Examples of student feedback on the Level 6 module at the University of Northampton

'The lecturer made use of the discussion rooms and I enjoyed the assignments for this module. I believe the content was delivered in a clear and concise way and each assignment had clear guidance.'

'The online lectures were well adapted and taught to keep us engaged and any questions we had were answered the best way possible.'

The approach at Falmouth University drew on the institution's experience of running fully online courses on the Falmouth Flexible platform, which used <u>Gilly Salmon's 'five-stage</u> <u>blended learning' model</u>. In 2020-21, the University implemented the model across its entire provision. As a result, Falmouth saw significant improvements in its student retention data: as of March 2021, undergraduate retention was better than the previous two years, with all but two of the nine academic departments showing improvement in their student retention figures overall, including a 46% improvement against withdrawal across all years between 2019 and 2021. A comparison of attendance pre and post-move to online also showed an indicative 6% increase in attendance with the advent of a digital attendance monitoring project.

In contrast, the strategic response at Teesside University deliberately avoided prescribing a particular pedagogic approach, allowing teaching staff considerable flexibility in how they deployed the existing technology suite. This non-prescriptive strategy was made possible by a high level of digital competence among teaching staff, who report a 96% satisfaction rating for the University's mandatory Digital Development Programme. To ensure consistency and quality in the transition to online delivery across 1,500 modules, the University developed a Resilience Review process supported by a Principles of Course Design for Hybrid Learning toolkit. This seven-part resource was designed to help staff identify which activities and assessments could be delivered online without a negative impact on the student experience, with clear guidance on how digital tools can be used alongside on-campus teaching

activities. Detailed and frequently updated online resources were provided to support staff (including daily lunchtime blog posts), and the University offered bespoke, one-to-one, guidance and coaching to help transition teaching into an engaging online experience for students.

# Digital tools help to provide proactive support and build relationships between students and staff

The structured, supported (or 'scaffolded') approach typical of effective digital pedagogical frameworks, also relies on regular opportunities for students to have dedicated interactions with their tutors. At Falmouth, the MA Film & Television and BA Film courses, covering a total of around 200 students, set up 'campfire' sessions, which are linked to modules but not specifically focused in their content. This gave students a protected digital drop-in period to discuss anything with their tutors, meeting the scaffolded support need embedded in Falmouth's Five-Step blended model. The resulting mixture of pastoral, academic and curricula discussion helped establish a community of practice, with highly-positive student feedback.

At provider level, the pivot to blended learning was supported by investing in a pilot to introduce a dedicated 'Student Adviser' role working alongside departmental academic teams. The advisers straddle centralised professional services and academic departments, using both qualitative and quantitative data sets to identify students at risk, initiate contact, and provide proactive interventions and support. The student advice team has also been supporting student engagement monitoring, seen by Falmouth as a core requirement in the blended delivery context.

At Northampton, a personal tutor on the Fashion & Textiles courses designed, developed and uses a 'hopes and fears' assignment to engage new students. This is a set of questions originally developed for 'pen and paper' responses that have evolved into a personal video recording task that is seen as highly effective in building staff-student relationships. Similarly, video feedback is used for formative reviews, improving transparency and helping students to understand the assessment process, reviewing and reflecting on their tutor's recommendations.

Robert Gordon University (RGU) invested considerable effort into ensuring that the transition to online learning and assessment was shaped by student views, with student representatives informing actions at course, subject and institutional levels, including through membership of key decision-making committees as well as the University's COVID response group. Student wellbeing was prioritised with a range of key initiatives, including online counselling provision as well as online personal tutoring to ensure a balance of academic and pastoral support. This was supplemented with online self-development provision, including a programme designed to equip students with academic and transferable skills to help them thrive on-campus, online and in the world of work, with enhanced support for groups with historically lower retention and attainment. Student feedback at the end of Semester 1 for 2020-21 pointed to the benefits of this student partnership approach, with 82% of respondents indicating they knew 'what to expect in terms of engagement in my course' and 89% indicating that they knew who to contact for advice and support in relation to their course.

# The translation of practical course components to a virtual environment has benefits for students

The limited opportunities during lockdown for experiencing hands-on elements of many courses have been a source of anxiety for students across the sector. However, examples

of practice show that the 'digitisation' of these practical components can be effective for fostering collaboration and engaging students. For a sense of the scale of possible collaboration, we might look to the Open University OpenSTEM Labs environment, which combines fully digital simulated 'experiments' with remote access to physical instruments for an authentic learning experience. Operating throughout the pandemic, the platform gained more than 10,000 additional users, helping other providers in the UK and globally to move to online practical learning during the period of restrictions. In March and April 2020, figures for the OpenSTEM virtual microscope, for example, peaked at over 1,000 users per day and on average 2020 user numbers increased by almost 300% compared to 2019.

## Quote from a module team chair commenting on OpenSTEM Labs chemistry activities

'This experiment gave our students a real laboratory experience, allowing them to use the skills they had learned earlier in the module - from planning an experiment to analysing the data with Python.'

At Falmouth, the impact of the pandemic meant that a Level 4 fashion design 'Cut and Construct' module had to be reimagined for online delivery, creating an opportunity to improve the students' experience of a demanding and complex technical workshop. Previously, this module was seen as difficult and, for some students, demotivating when delivered through intensive face-to-face sessions. Following the redesign, students found it easier to follow the pattern cutting classes online, engaging with the module more reflectively, with a staggered and repetitive approach, leading to highly-positive feedback in student evaluations of the module and qualitative feedback through the Staff-Student Liaison Group discussion forum.

## Examples of feedback on the Cut and Construct module via the Staff-Student Liaison Group

'Students finding online pattern cutting classes easier to follow than traditional in person.'

'It's helpful and an easier workflow to have the teacher there to show us and assist, but with the time in between to work on each step and have the pre-recorded videos and PDF's to look at side by side.'

'Great balance of workload across modules. Not over/under worked.'

At Northampton, the drawing classes for Textiles students, designed to support them in developing creative approaches to fashion drawing, are normally a practical on-campus activity. The hour-long live sessions were adapted to run online with live demonstrations and tasked students with several timed and drawing-specific activities. Students presented and shared their work through a digital platform in interactive sessions. The lecturer also produced a series of short videos for students to preview and revise textile dyeing and printing techniques and processes, featuring technical support staff. Student feedback suggested that the students enjoyed viewing and benefitted from the video demonstrations before the drawing activities and the focus on practising before and after the interactive sessions.

# Digital tools offer opportunities for collaboration between students and with employers - especially on practical courses

Another example from Northampton shows how the forced transition to online delivery inspired students to use digital tools in ways that exceeded the 'usual' outcomes expected from course assignments, demonstrating great creativity in the presentation of project results. As part of the second-year course on Fashion, Textiles and Footwear and Accessories, students complete an industry challenge in which they design a collection for an employer partner. Previously, the final output was presented to the partner in person; when lockdown restrictions made this impossible, <u>students produced video presentations of their collections instead</u>. The industry partner was so impressed by the output that they increased the winning team's prize. The students reported that the project helped them develop communication skills, professionalism, resilience and overall contributed to their employability.

#### Feedback from the global brand manager for the industry partner on the course

'We were very impressed with the content and delivery of the projects. Not only did the students provide relevant and exciting ideas but they also rose to the challenge when told they couldn't present as planned due to the virus. I was pleasantly surprised when I saw that none of the teams had sent a PowerPoint presentation through and appreciated the extra mile they all went to deliver their projects.'

At Falmouth, digital platforms created opportunities for interactions between students across year groups that would not have been possible previously. For example, the Architecture course set up an 'Online Work in Progress' exhibition as an asynchronous activity and online space for students to share their work across the four levels of study. This helped students to gain a better understanding of their peer group's work and the standard of submissions, while facilitating connections to other students with similar interests and skills. On the Interior Design course, collaborative projects were set up between year groups so students could share the experience and learning space across levels and different disciplines, both within Falmouth and with overseas providers. All students accessed the space and students studying at Levels 3 and 4 were able to connect with those at Level 6 to discuss future projects and benefit from skill and knowledge exchanges.

At the Robert Gordon University, the online employability support platform (eHub), first introduced in September 2018, saw a substantive increase in usage, with more than 200% growth in user numbers between July 2019 and July 2020. The University's Employability Enhancement Award, an eight-topic online learning programme, saw almost 2,000 students complete one or more of the tasks to prepare for the workplace of the future.

The benefits of digitally-enabled collaboration can be particularly pronounced for providers operating the same course across several campuses. For example, the Professional Graduate Diploma in Education (PGDE) course at the University of the Highlands and Islands, taught to groups based at several colleges, used digital tools to form groups of students across campuses, especially where groups at each college were disproportionate in size. For example, a weekly, practice-based session was set up as two 'streams' of 45 students using online conferencing, with students from different colleges benefitting from the opportunity to share their own practice with the wider group and ensuring consistency of delivery across streams. The course tutor was highly commended in the 'most engaging online tutor category' at the 2019-20 student-led teaching awards.

## Conclusions

### Features of good practice in digital delivery

As providers reflect on the impact of the mass transition to digital delivery, evidence emerging across a range of disciplines is starting to shape our understanding of what constitutes good digital practice. <u>Our earlier study</u> showed how high-quality, digital delivery and assessment can have a positive impact on student engagement. The evidence presented in this paper identifies some of the key components necessary to provide an engaging student experience of digital delivery. These are:

- Provider-wide guidance on course design with a set of principles consistently adopted across modules, course and subject areas. This is likely to prompt, among other changes, a review of institutional and course learning and teaching strategies.
- A pedagogy-led blend of instructional (for example, pre-recorded 'bite-sized' lectures) and interactive (for example, live task-focused sessions) content, with a focus on active learning methodologies.
- The ability for students to easily access and revisit material in their own time (for example, clear signposting within the virtual learning environment and lecture recording).
- The use of digital platforms to encourage new forms of collaboration between students (including across years, disciplines, and providers) as well as with industry partners.
- > Opportunities for 'live' interactions with academic staff.

An important characteristic of each of the points above is that they reflect what was known to be effective in digital learning prior to the onset of COVID-19 restrictions and the forced shift to digital delivery. However, these approaches previously tended to exist in pockets of practice. Now we are able to draw on the experience of the mass move to digital and blended delivery.

In some cases, our experience of the mass pivot challenges pre-existing beliefs around the art of the possible. As the case studies accompanying this paper show, digital assessment at scale is not only possible, but can be associated with high levels of engagement and, in at least some cases, apparent benefits for student performance. As the immediate pressures of the pandemic abate, providers will benefit from reflecting on how digital delivery can further enhance assessment practices.

Similarly, many practical courses made a successful transition to digital delivery, including subjects where previously this may have been considered unlikely. Laboratory-based exercises enabled by OpenSTEM show the potential for sharing digitally-enabled resources across providers, while positive student feedback from Northampton and Falmouth points to some of the ways in which challenging practice-based modules within fine arts subjects can be made more accessible with a considered approach to digital delivery.

#### Students demonstrating resilience

The examples gathered for this paper provide evidence of the ways in which students have demonstrated their flexibility, resilience and creativity in highly-challenging circumstances. Students sought out opportunities to collaborate with their peers and engage with employers. Evidence in the detailed case studies shows how some students used their experience of

digital learning to enhance their employability skills. In this way, students who have studied during the pandemic are likely to have developed skills which make them attractive to employers.

#### Positive digital practice and improved student engagement

Taken together, the outcomes of sector surveys and the case studies accompanying this paper, provide an early evidence base for the benefits of digital delivery and assessment to student engagement, progression and attainment.

It is very clear that, when students encountered positive pedagogical practice in digital delivery, it led to improved satisfaction with their academic experience. The evidence from our case studies suggests good practice in digital delivery is also associated with increased student engagement with their learning and, in some cases, may be associated with improved student performance. Further data is needed to support firmer conclusions on the impact of digital delivery and assessment on student performance. Anecdotally, several providers have reported that they believe changes to assessment practices have had a positive impact on student attainment. This includes moving away from reliance on high-stakes final exams, with greater use of formative assessment, and redesign of assessment instruments to test understanding and skill rather than recall, underpinned by the use of digital tools.

The widespread adoption of digital and blended learning represents a major opportunity for the sector to capture more systematic evidence, particularly quantitative data, pointing to the impact of the digital shift on student progression and achievement. For example, the latest update to the <u>OfS Access and Participation dashboard</u> shows that, in 2019-20, the attainment gaps narrowed across a range of student groups including BAME students and students with disabilities. There would be value in future exploration of the possible links between good practice in digital assessment and these data. Such evidence would be helpful to underpin planning for future delivery and assessment approaches. However, we are aware of the difficulties that many providers face in balancing the immediate challenges and time pressures of providing high-quality teaching and learning with the need to assess the impact of these practices. We look forward to continuing to engage with our members to explore these impacts and associated evidence in greater detail.

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