Rapid Response Briefing Paper
The impact of Covid-19 on Teaching, Learning & Assessment

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SUMS is a membership-based higher education consultancy, a registered charity and not-for-profit organisation that provides expert consulting to universities across all professional service areas. We have been talking to university leaders about managing the Covid-19 crisis and their visions for the future. With views gathered from a series of one-to-one interviews, SUMS' Community of Practice Groups meeting virtually, along with student surveys, SUMS is able to take a service-by-service review of university operations. It has found a sector eager to change and seeing positives in adversity.

Claire Taylor and Nick Skelton, Principal Consultant and Associate Consultant, share insight from their research into the implications of the pandemic on Teaching, Learning and Assessment...

Teaching and Learning

Digital Education

In response to Covid-19 and social distancing restrictions, many universities were quick to move the remainder of their 2019/20 teaching online. For some students, this will have meant little change with Semester 2 entering its closing weeks. For others – those on January starts, year-long professional courses or just about to start pre-sessional activity - a much higher proportion of teaching will be delivered through this different mechanism.

Whilst it is admirable that so much has been done so quickly, the quality of provision will have suffered due to speed of transition and lack of knowledge and experience of the majority of staff in delivering teaching wholly online. Indeed, for many lecturers this will have been their first experience of delivering online content. In this immediate timeframe, students are likely to accept a lower quality of provision: engagement levels will have been forged through face-to-face tuition and will sustain through this transition. For new modules, the digital experience will need to be the source of that engagement.

SUMS has been working with a number of institutions and with the network of educational technologists across the sector to understand the impact and opportunities that Covid-19 offers.

Universities are considering a number of options for September 2020, including on-campus, digital-only, postponed starts, and bi-modal delivery. Each university must scenario-plan to understand the implications of each of these approaches within their own context. For example, small private institutions with high proportions of international students might favour postponed starts, since the majority of their students may not be able (or willing) to travel in September 2020.

Those universities who already have experience and expertise in delivering online teaching may be able to adopt the second approach, whilst those with high levels of teaching requiring specialist space or equipment (STEM, creative or performance) will need to at least balance digital provision with an on-campus experience.

What does good look like?

Digital education is not just about delivering content to students online – replicating lecture theatre content in the digital world. That may work, out of necessity, as a short-term fix for the Covid-19 crisis, and it has the advantage of being both quick and cheap to implement. However, designing a good online experience is quite different to designing a good in-person experience. It will take time and effort and universities will need to upskill their staff to produce it. If your institution is not a leader in digital education, now is a good time to learn from others in the sector. Sector bodies including Jisc and ALT, the Association for Learning Technology, are good places to start. SUMS will be producing a series of papers on Digital Education over the next few months (see below for further details).

SUMS sees people across the sector asking: "How can we create digital learning resources by September?" To some extent this is the wrong question to ask; education is a social process, it is more than the delivery of content. However, there is an understandable desire to reach for ready-made solutions. To explore this, consider three options:

1. Published courseware (commercially produced online learning materials)
2. Open educational resources (OERs: digital learning materials produced by another institution and freely licensed)
3. In-house developed resources.

Commercial solutions can be expensive and potentially sterile without specific institutional cultural characteristics. If learning comes mainly from the digital equivalent of a textbook, students may question the value of their experience. Whilst the idea of OERs was popular in the 2000s, the concept never really took off: the academic community, unsurprisingly, seem to prefer generating their own content rather than teaching other people's. Palpable engagement from academics is key to generating and sustaining engagement from students, especially online. Neither commercial courseware nor OERs offer a quick-fix, zero-effort solution: they could both be part of a long-term term approach but are not likely to provide the full picture.

The most successful digital education programmes are those led by lecturers, drawing on expertise from professional academic librarians, learning technologists and learning designers. For successful, sustainable digital education it is essential to upskill your academic staff so they have the ability to produce their own digital learning resources, the confidence to lead digital learning and interact with students online. recommends that you put resources into a similar programme at your institution.

The best digital learning programmes use different techniques to campus-based learning programmes, but like anything else these techniques can be taught. Some universities are already running 'crash courses', delivered *online*, to teach lecturers how to teach *online*. SUMS

How can we prepare our staff and students for this change?

It is tempting to see Covid-19 as an occasion where "change happens gradually, and then suddenly", to misquote Hemmingway. But Covid-19 will not inevitably lead to change, or rather, it will not inevitably lead to successful change. There may even be a bifurcation across the sector:

- Universities which are already leading in digital education will now embrace this sudden necessity and are more likely to make a success of it. In future years they will use this to spur even greater moves to a blend of physical and digital education.
- At other institutions where the digital education strategy is less clear, sudden moves now may be resisted. Any digital failures will be held up as prima facie evidence that 'face-to-face is better' and lead to future initiatives stalling.

If your university is currently in the second group, it is vital to take a people-centric change management approach. Listen to the concerns of your staff and of your students and take steps to address them.

The limited time to prepare before the autumn, and confidence that new arrangements will hold up once in use, are likely to be top concerns from staff. Universities which prioritise digital education should find other activities they can shelve to create capacity amongst their academic staff. Time until autumn 2020 is short, but we are not aiming for perfection, we are aiming to deliver the best we can in this situation.

SUMS has surveyed and interviewed a number of students on their experience of the move online. This indicates that students may accept a digital experience which is rough around the edges in its presentation, as long as other needs are met. Students highlighted that clear communication and personal interpretation from a friendly face were key. If we communicate clearly with students, support them and engage with them, that will go a long way to meeting their expectations.

What might future good practice look like?

"The future is already here, it's just not very evenly distributed" - William Gibson

The current move online provides an opportunity to rethink the way things have been done before. Different tools permit different techniques, so digital tools are a spur to new pedagogical practices. Successful digital education initiatives are pedagogically led, not technology led. Little of this is entirely new: flipped classroom, blended learning, active learning, and other approaches have been in use for some time and have been studied and evaluated by educational practitioners.

There is much good practice across the sector in the UK. SUMS is currently evaluating this through a comparative study of digital education and will publish more research on this in the near future. Even if you see your university as a follower in digital education there will already be good practice within your institution. Innovation often comes at a local level, from individuals within particular schools. Look for these people, and bring them into the planning process for 2020/21, while appreciating that scaling up local practices to the whole institution is a challenge.

With greater digital adoption SUMS sees potential to move higher education even further towards an active experience, where students take greater responsibility for their own learning. The following table gives an indication of this trend:

Traditional Practice	Enhanced Practice
Students are passive learners, delegating responsibility for their own learning to the university	Students are active learners, taking responsibility for their own results
Education is driven by inputs, corralled by an attendance timetable. Students expect that if they turn up to the times and places in the timetable, they will passively receive an education, even if they are unprepared.	The educational timetable is driven by outputs. We communicate clearly to students what tasks they are expected to deliver when - each day, each, week, and each month
Face-to-face, real-time (synchronous) learning is seen as the best or only way to learn	Learning design includes synchronous and asynchronous learning (e.g. discussion forums, shared documents, blogs)
Teaching students to develop good study practices is an afterthought, delivered by a separate unit	Development of study skills is integral to the course: the course objective is to develop students' skills as independent learners, as well as their skills in the subject
In person broadcast lectures (one-to large groups, non-interactive) are the routine tool used to deliver information	Bringing students together for large lectures is used as a plenary tool, to develop community, for guest lecturers, to mark significant moments
The virtual learning environment is primarily a content repository	The virtual learning environment is a social tool for student group work and student-lecturer discussion. The lecturer is visible and active within the VLE.
Online activity is an optional add-on to the in-person experience	Online education and in-person education are integrated as one stream
Live lectures are video recorded, for students to catch up after the event	Video content is watched by students in advance of a live lab session or seminar, for students to prepare in advance
The module is delivered the same way it has always been delivered	The module is redesigned regularly
Pen and paper, closed-book examinations under tight time-constraints, focused on recall of content	Take away examination papers which permit use of digital tools and access to information sources, testing the students' ability to interpret, contextualise and apply information.

In planning this shift, we should look at some of the biggest problems we currently face in the old model (e.g. lack of large lecture theatres, difficulty constructing the timetable) and attempt to solve them through new approaches, e.g. delivering one to many broadcast content online. Simultaneously the shift will create new problems for us to grapple with:

- Do we have enough technology-equipped flexible spaces?
- Do our staff have sufficient skills in learning design?
- How do we monitor student engagement when more delivery is online?

Impacts
- Potential revenue hit from reduction in fees payable for online courses
- Online learning perceived as lower value in some cultures
- Attractiveness of courses reduced if students cannot access maintenance loans
- Retention levels tend to be lower for online courses thus financial impact might last through to 2022/23 and beyond
- Information is not yet available to start timetabling, which traditionally has a long lead time.

Remaining Uncertainties
- Financial implications if whole or parts of courses are delivered online
- Results of scenario planning
- The extent of social distancing restrictions in the autumn is unknown, making planning of teaching space difficult
- Proportions of teaching that can be delivered in person in September

Opportunities
- Bolster resources (educational technologists, IT support staff and systems capacity) to support higher volumes of online delivery
- Make courses available to academic staff to teach them skills required to deliver the transformation required

If you are interested in finding out more about the transition to digital education, SUMS consultant Nick Skelton will be producing a series of papers on this topic. The first paper is available here. Further resources will follow to help the sector respond to Covid-19.

Please contact Nick at n.skelton@reading.ac.uk.

What might physically distanced lectures look like?

Assessment

The initial response from a number of universities was to cancel spring assessment sessions followed quickly by announcements that summer assessment sessions would be converted from physical, synchronous examinations to take-away examinations. Most have promised safety nets to students, protecting levels of achievement to date so that changes in assessment protocols will not negatively impact marks. Some health-related programmes have had to fast-track their students through final year assessments and out into the NHS and supporting industries.

> **Key Terms:**
> - Collocated: where people are gathered in one place (as opposed to dispersed: where people are not in the same place)
> - Synchronous: where people complete an action at the same time (as opposed to asynchronous: where people complete an action at different times)
> - Formative: assessment which is for learning (as opposed to summative: assessment of learning)

Many universities have already experimented with digital assessment, for example quick online quizzes in lectures to check understanding or small scale summative online assessment, mainly in a multiple-choice format. SUMS published an e-assessment briefing paper in 2018 and concluded that there was no burning platform for transformational change for the majority of institutions. Covid-19 now provides that platform!

Similarly, to digital education, there are first and second-level changes associated with assessment.

Iterative and Adaptive Changes

First-level change can be delivered quickly by converting summer exam sessions into take-away assessments.

End of year exams are collocated and synchronous: they are summative and can represent significant proportions of a year or course mark. They are a big deal to students and present a significant amount of work to the organisation in marking, assurance and governance.

Simply moving standard examinations online comes with many issues:

- The assumption is that people will be physically dispersed but will be able to access a specific system to complete their assessment. What happens if their wi-fi goes down? What if they do not have access to a quiet space or appropriate hardware or software?
- How might we assure quality? Is the right student taking the assessment with access to the right materials? Is it their own work? Does remote proctoring (if even deliverable) represent appropriate assurance?

Most universities have decided that online examinations are not guaranteed to deliver high enough levels of assurance or accessibility and that converting to take-away is the more equitable option.

Assessment guidance and marking schemes will need to be re-written but assessment can go ahead, and current processes can be adjusted.

Transformational Change

Second-level change asks more difficult questions and leads to greater transformation. What might assessment look like in the future? Might it be more authentic, generative, inclusive and equitable? What are your university's principles and values and how should they be interpreted through the lens of, and opportunities inherent in, digital assessment?

Do exams need to be strictly synchronous? Digital assessment platforms enable academics to produce question banks from which random sets of questions are distributed to each student. No student receives the same set of questions.

Impacts

- Inability to run summer examination sessions as planned
- Quick change from collocated, synchronous exams to take-away assessments
- Virtual examinations boards
- Reduced occupancy in traditional examinations over next year leading to longer sessions.

Opportunities

- Reimagine assessment, reduce dependence on collocated, synchronous, pen and paper exams
- Bring examination boards processes and information provision into the 21st Century!

If you are interested in finding out more about the impact of Covid-19 on assessment and the transition to digital assessment, principal consultant Claire Taylor has been working with universities in this area. Please contact Claire at s.c.taylor@reading.ac.uk.

Will this be the end of traditional collocated, synchronous, examinations?

Curriculum & Portfolio Planning

It is business as usual for universities across the sector to maintain and develop their portfolio of teaching activity. New courses, new modules, and new content as the academic staff establishment changes. Strategic decisions are made to invest in new academic areas or close down underperforming units. Generally, universities are good at growing their portfolio, and are less good at pruning.

SUMS does not expect significant immediate change in portfolios as a result of Covid-19. Where institutions have already planned reductions in module or programme delivery, the financial shock of Covid-19 on the organisation may accelerate scheduled curtailment.

It is in the short to medium term that SUMS expects curricula to change. In the short term, courses which have been heavily reliant on overseas students may be at risk. Here we would expect to see course closures, reductions in specific optionality and increases in module sharing.

In the medium term, when the financial impact of Covid-19 becomes clear, some institutions may need to have a 'root and branch' review of their teaching portfolios to achieve significant cost reductions. This is likely to result in consolidation of academic areas and programmes, and a reduction in the number of modules made available.

Impacts

- Requirement for cost reductions in the short to medium term
- Reduction in breadth of curricula, closure of some academic areas

Remaining Uncertainties

- Future of non-standard activity e.g. apprenticeships
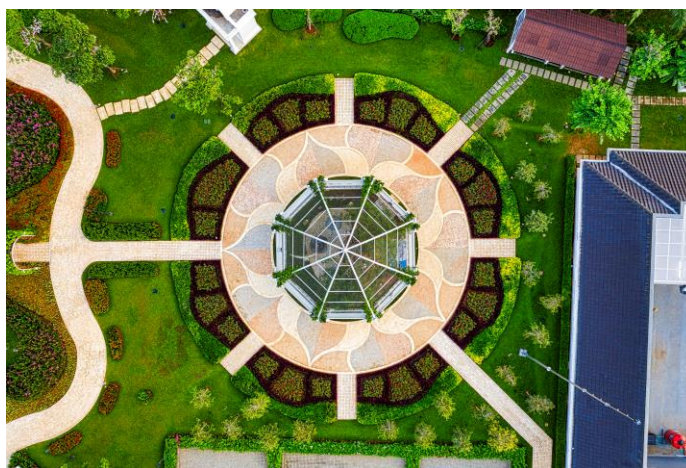
A curriculum portfolio: like a well landscaped garden?

Opportunities

- Delivery of content through a variety of modes for different markets
- Prioritising investment on high performing programmes
- Working together to maintain optionality where required

If you are interested in finding out more about the impact of Covid-19 on portfolio planning, principal consultant Claire Taylor has been working with universities in this area. Please contact Claire at s.c.taylor@reading.ac.uk.

Pre-sessional Activity

There are a number of specialist institutes for language study by international students across the UK Higher Education Sector. These deliver pre-sessional and foundational English language tuition and IELTs testing to enable international students to proceed onto undergraduate courses.

IELTs testing was suspended in China in February 2020 and will not recommence until mid-June at the earliest. There have been significant reductions in in-country testing opportunities elsewhere. This has already impacted on the process for the recruitment of international students.

Universities have responded by analysing the online versions of such tests and indicating which online versions would be accepted for which types of programme. There are similar quality concerns as those outlined for online assessment elsewhere. High quality online tests will be accepted for direct entry, but others may only be valid for pre-sessional activity (e.g. Academic English or International Foundation courses).

Most of these centres have responded to the pandemic by moving content online, accepting that it is not directly comparable with face to face activity: students gain significantly from immersion in terms of social and cultural engagement as well as high levels of functional use of the language. Some are addressing this through an increase in conversational contact hours. Teaching is in general asynchronous due to the variety of time zones students are in. There are also risks related to accessibility of online activity for all potential students e.g. in sub-Saharan Africa access to IT equipment is lower than in China or the Middle East.

Signing up for an online pre-sessional course is seen as a lower risk position than the uncertainty of whether to travel in September so it seems that numbers are holding strong. Warwick has offered its pre-sessional courses free of charge, but it appears to be an outlier: most are holding price points or offering only a small discount (price is seen as an indicator of quality in this market).

While direct income streams from this activity will only be partially impacted, indirect income streams (accommodation, catering etc.) will be written off and there will no longer be the expectation that a majority of pre-sessional students will continue onto institutional courses.

Impacts
- Significant indirect financial impacts
- Potential reductions in effectiveness of delivery of pre-sessional activity if moved online
- Increased competition from established online providers or in-country provision if moving activity online.

Remaining Uncertainties
- When travel restrictions will be lifted
- Impact of pandemic on willingness of international students to leave their home countries to study
- Whether institutions will prioritise transition of pre-sessional activity online.

Opportunities
- Ability to offer dual-mode pre-sessional activity in future years opening up more markets and potential volume upsides
- Ability to upskill students more through judicial use of online activity in-country (e.g. Chinese undergraduate students normally finish courses in July which leaves little time for pre-sessional activity before postgraduate courses start in September)
- Potential peak in demand for 2021 as pent-up demand is realised.

There is no doubt that Covid-19 will change teaching and learning in universities across the world. We are already seeing its impact as the long-needed catalyst for an explosion in digital learning. The key to success will be to design content, delivery and assessment to work specifically for the digital environment – to work alongside content, delivery and assessment in the physical world. The most successful universities will recognise quickly that these are complementary channels to enhance student experience and successful outcomes, not simply carbon copies of each other. The real opportunity is to refocus teaching and learning on the student – long talked about as an approach, rarely a reality – and in so doing, create universities that are truly fit for the future.
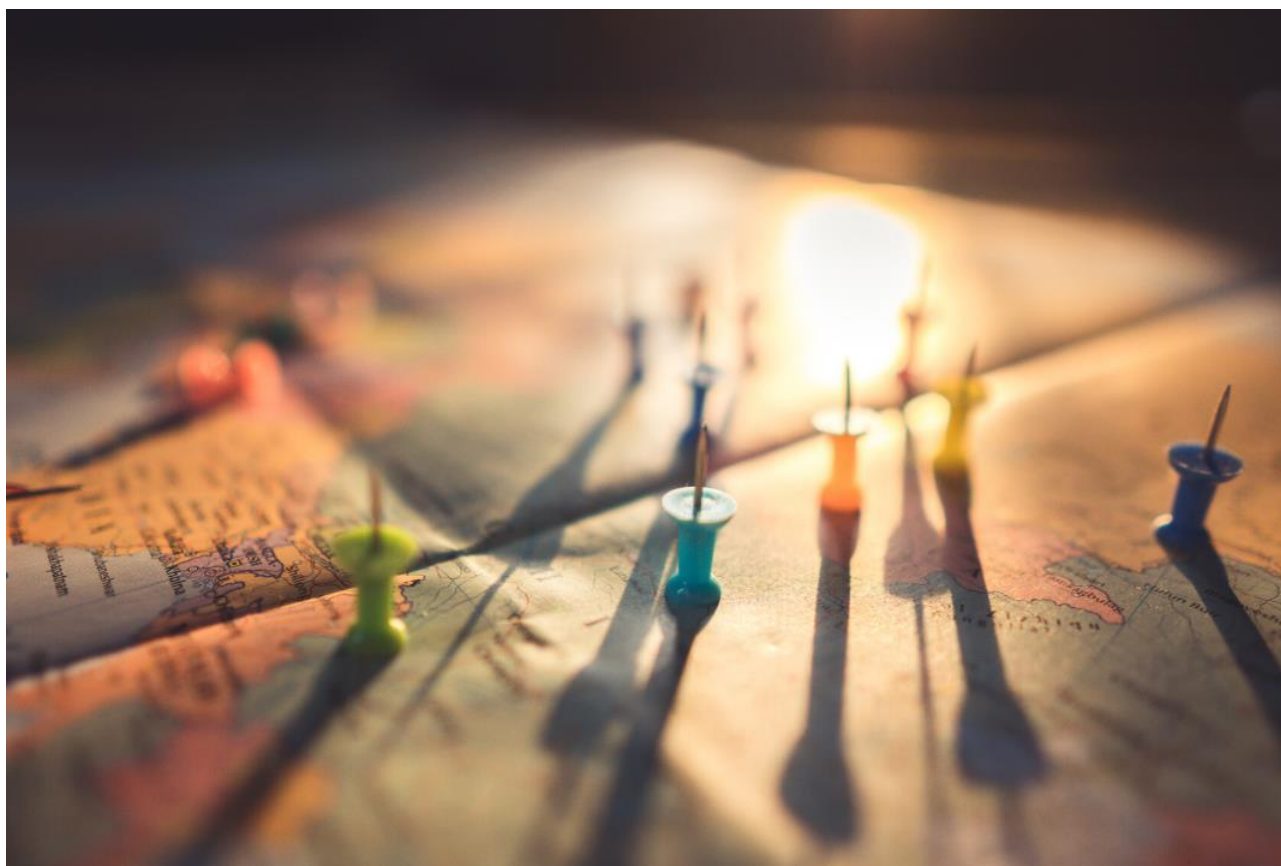
If you are interested in finding out more about the impact of Covid-19 on pre-sessional activity or IELTS testing, principal consultant Claire Taylor has been working with universities in this area. Please contact Claire at s.c.taylor@reading.ac.uk.