

# Quality Compass

## Hybrid Futures: Hopes for Higher Education

July 2021

This summer edition of QAA Quality Compass focuses on what the future of higher education in the UK may look like as many providers plan for hybridised models of education delivery for the near and long-term future. We explore some of the new terms being used – like ‘hybrid’ and ‘hyflex’ – and the benefits and risks of the ‘smart campus’. We also examine where digital pedagogy fits in the wider higher education ecosystem, and consider how physical spaces are going to be used post-pandemic. Finally, we round off with some thoughts on strategy relating to the ‘smart campus’ and EdTech more widely as the sector imagines a future beyond the pandemic.

We offer Quality Compass as a conversation-starter, linked to our wider Membership offer. We are keen to engage with you and provide the opportunity to share your thoughts and practices.

If you would like to contribute to future editions or respond to anything we have covered in this issue, please contact us at [membership@qaa.ac.uk](mailto:membership@qaa.ac.uk)

### The biology of learning

Let’s start by unpacking three key concepts – [hybrid](#), [hybridity](#) and [hybridisation](#). Our guidance on [Building a Taxonomy for Digital Learning](#) rounded up some of the terms and phrases that started to generate a buzz during the pandemic. Originating in biology, a hybrid fuses existing parts while simultaneously becoming a new composite in its own terms. Hybridisation is the creative process that underlines that transformation. In the higher education sector, the emergence of hybrid teaching and learning experiences represents a shift in thinking about education and consequently its impact on student progression and graduate outcomes. The key difference between a hybrid and a blended model is a deeper student involvement in the co-creation of the learning experience. Hybrid models engage learners continuously in *how* they learn, enabling staff and students to help define the balance between different learning activities.

Hybrid-learning environments, by their nature, redefine the traditional boundaries of in-person and digital experience, whether that may be online and off-line, virtual and onsite, or synchronous and asynchronous. Hybridity, as a transformation of a culture, and the emergence of the new, encourages us to think about flexible futures, and how teaching and learning could be designed for delivery across different modes of study effectively.





'Hybrid flexible' or 'hyflex' is a hybrid model enabling students to choose how they engage with their study. Speaking at our 2021 [Quality Insights Conference](#), Brian Beatty from San Francisco State University described [hyflex](#) as 'when students can choose to attend class either in an assigned face-to-face environment or in an online environment (synchronous, asynchronous, bichronous)'. With hyflex, these choices can be made spontaneously – attending a lecture one day, video conference the next, or watch a recording the day after that.

Hybridisation can be more than additional opportunities for students to select the model of delivery they prefer. There is a genuine opportunity now to encourage student-led co-creation, whether that be *in* the curriculum (taking place during a course, to smaller elements of it, like essay titles) or *of* curricula (to larger elements, like module design, before a course begins), as well as learning, teaching and assessment approaches. The [University of Edinburgh's ASID project](#) is one example of the latter. The project originated as an initial response to the challenges of COVID-19, and allowed academics to work with groups of students, as co-creators, to improve the learning environment by 'adapting course materials for computer aided assessment; ensuring all course materials are digitally accessible and of high quality; developing expertise in, and advice for, the creation of video content; and determining a suitable digitally-mediated alternative to traditional workshops'.<sup>1</sup> Hybridisation, therefore, allows flexibility for a range of different approaches to student engagement and curriculum co-design.

## Don't panic – plan

Although digital learning and a greater emphasis on blended delivery was adopted by many providers in the past year, there is a broad acknowledgment that this style of teaching and learning has come to be associated with 'panicgogy', or the practices associated with just getting by during the pandemic, rather than a deliberately designed approach to learning, teaching and assessment practice. Providers have also had to wrestle with the perception that online and even blended delivery is a facsimile of the university experience and of lower quality because it takes place mostly on a computer rather than on campus. The reality, as many providers found during the emergency pivot to online delivery in March 2020, is that planning, preparing and delivering digital learning and assessment, can take longer and involve more effort than in-person delivery in order to function seamlessly for staff and students. The sector now has a real opportunity to show that hybrid approaches are pedagogically sound and can give students greater choice in how they learn. This would allow providers to create a fresh narrative to reposition their strategic planning and turn the negative perception of online modes of learning into a positive, with the agency of the learner as the key to this transformation.

## What might a well-designed hybrid model aim to achieve in terms of the connection between student and teacher?

As outlined in Ronald Barnett's [Ecological University \(2018\)](#), educational institutions can be seen as interconnected ecosystems that link people and their ways of thinking to the environment in which they are learning. Well-designed hybrid models can further connect the institutional ecosystems with a changing labour market, and the wider local and global community at large. This connection can be made through technologies and approaches that are being adopted everywhere as part of the 'new normal' – a more flexible approach to working hours, remote working, and electronic communication and collaboration platforms.

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<sup>1</sup> See [www.maths.ed.ac.uk/school-of-mathematics/news?nid=894](http://www.maths.ed.ac.uk/school-of-mathematics/news?nid=894) for more detail on the ASID project.

Hybrid models can help to create meaningful learning environments where academics and students feel empowered to collaborate and engage in a genuine, enthusiastic way. The underlying principles for hybrid models need to be responsive to the learner's needs while ensuring that student engagement, irrespective of mode or place of learning, is focused on achieving module and course learning outcomes.

Fostering those connections for students between their formal learning, future professional practice, and wider societal engagement does need to be designed. We cannot assume it will happen automatically. If we take this connectivity as a cornerstone for a learning and teaching strategy, it can then inform principles and frameworks to support staff training, course design and longer-term evaluation of a provider's delivery. Having access to real-time information on the students' learning progress can help teachers adjust the pace and content of learning. Taking an institutional ecosystems' approach to hybrid models will also support student engagement, retention and progression in the long run.

## Models of hybrid teaching and learning

Hybrid models will differ significantly depending on many factors including course content, student demographics, IT infrastructure, digital access and proficiency of staff and students, and professional statutory and regulatory body (PSRB) requirements. No single hybrid model or approach will fit all, and the tools and technologies used will vary across different institutions.

In a hyflex model, the reusability of instructional material becomes important, and alternatives to how students participate should be included in the design - such as the example from San Francisco State's daily choice between in-person, digital or asynchronous access. This will allow for a personalised, learner-centric experience, with students seeing value in the freedom of choice offered to them, as it provides access to learning materials when they need them and in their preferred format. This flexibility also supports students with particular needs: non-neurotypical students; students with phobias, post-traumatic stress disorder or even hearing disabilities, and specific learning difficulties that might require them to pause, repeat and revisit learning materials. Hyflex models also develop digital confidence, helping students to meet employer expectations through developing greater understanding of how to use digital tools in a professional environment.

From a strategic viewpoint, the design principles of a provider's curriculum offer will need to be adapted for hybrid models. Hybrid and hyflex models are likely to require an adjustment to quality requirements to ensure equivalence of student experience and assure the value of qualifications. These changes may be no more than a minor adjustment to academic regulations to accommodate hybrid models, but they may be more involved. It might make course approval and ongoing monitoring more complex, with a greater number of variables to account for when evaluating the effectiveness of a course. Hybridisation also needs an increased focus on accessibility and equivalence of learning outcomes. As mentioned earlier, the upfront planning is important and ongoing course management may be more of a team effort involving a combination of professional service staff alongside academics and students.

While moving online does not automatically mean that academic integrity is at risk, hybridisation still needs to pay attention to security in assessment. QAA recently published advice on [digital assessment security](#), covering online invigilation among other things, to ensure good academic



conduct in online assessments. It encourages providers to examine their current data security measures, be mindful of biased online invigilation systems, and enable staff and students to use digital security systems optimally. Beyond assessment, course teams need to be informed about copyright requirements and be able to share that knowledge with students.

## The purpose of space in a hybrid/hyflex future

Look at any campus in the country and you can see the results of decades of investment in physical space. Institutions have developed rich, diverse and widely used environments. It may be that students, craving the onsite experience and with vaccination rates higher, return in greater numbers in 2021-22, with campuses in full use again. But when students are given the choice to access learning digitally, and assume for a moment they take that opportunity up in large numbers, what happens to all that space?

If hybrid and hyflex philosophies are adopted, and take-up reduces onsite student numbers or changes the ways students use onsite space, providers will need to consider repurposing their estate - for example, transforming traditional lecture-style halls and creating multi-functional rooms with flexible uses. This can enable the development of new learning approaches based on the course or cohort using the space. Existing approaches include 'learning cafés' (where students prepare a topic in a group to present and discuss it with others, who are also in small groups) and 'fablabs' (digital fabrication laboratories, small-scale workshops capable of manufacturing almost anything) which can benefit students working on group projects in the design and creation of outputs, or simply support informal learning.

Such repurposing may, or may not, involve major building work. Of the two examples above, learning cafés require only a small space with few facilities; a fablab will need specialist equipment like 3D printers and laser cutters, representing a significant investment. Reconfiguring a large lecture theatre is also a major commitment. Despite claims of its demise from a variety of sources, the lecture remains a cornerstone of higher education delivery in many courses. We also know that smaller learning interactions are highly valued by students, providing more opportunities for them to participate, feel noticed, and receive (and give) feedback - all of which promotes a sense of community. The disruption caused by the pandemic provides a prompt for institutions to consider what they want from their spaces and how likely they are to suit new learning approaches for years to come.



## The 'feel' of the campus experience

The purpose of the campus space has been to create a learning environment where students can work on their ideas and projects with a high degree of personal engagement with staff and interaction with fellow learners, creating a sense of belonging and community. The challenge for providers will be to keep the engagement and interaction that being on campus generates while also delivering hybrid models across a range of different disciplines.

Technology has been used extensively on and off campus for some time. By their nature, the different modes or types of course available to institutions do not necessarily require onsite attendance. Additionally, prior to the pandemic, a number of providers saw a challenge in getting their students to stay on campus outside teaching time, leading to the concept of the '[sticky campus](#)' - activities designed to encourage students to 'stick around'. We suspect there will be an ongoing

evolution as students initially want to be physically present, then gradually moving to a more hybrid approach. There is also the ongoing uncertainty around the potential for further physical restrictions.

In the future, in a post-lockdown world, it is primarily the flexibility in the balance between onsite and offsite, facilitated by technology, that is going to change. From an academic standpoint, some courses require technical supervision or need to work in small groups to produce an output or production piece, so the balance for those courses has tended towards onsite. Now, planning for alternative participation modes brings opportunities for practical skills or work-based activity to be delivered in other ways including those providers were forced to adopt, or at least accelerate the adoption of, over the last 18 months, like [live briefs](#) and remote research projects.

These disrupted approaches allow for access, and ensure inclusivity for students who may not be able to attend on-campus sessions for a variety of reasons, including work commitments or caring responsibilities. Courses that have fieldwork or placement requirements may benefit more from a hybrid model of delivery, where multiple participation modes could exist simultaneously (on-campus; on-campus-online; remote online-synchronous/asynchronous).

The feel of the campus is set to evolve as we all redefine how students and staff use it. In addition to learning cafés and fablabs for students to socialise, [micro-campuses](#) in local communities and alumni hubs could be a useful way to develop outreach, educational or research activities. More common in the United States, but also adopted in the UK, micro-campuses give institutions greater public visibility while providing informal and stylish drop-in spaces for students to use. Supplementing online experience, such spaces could offer opportunities for students to access and engage with local employers and the wider community that could help to cement a sense of belonging for students. It is debatable whether micro-campuses are inherently better at generating certain benefits compared to traditional campuses or online spaces. However, the use of micro-campuses can help students build mentor relationships, research collaborations, or to gain work and internship opportunities.

How support services and staff interact with students in a hybrid context will need careful consideration too. Some services for students, like counselling, could continue to be provided via video conferencing, although there will continue to be mixed views about the efficacy of digital counselling services from both the student perspective and those providing the support. Enhanced technical support will also be needed, due to additional equipment being used as well as multiple users from remote locations logging into a lecture at the same time.

Concentrating on the virtues of the digital aspects of hybrid programmes does risk becoming a list of reasons why students should effectively stay away from the campus environment. So, what's the reverse? What do we anticipate students will come to campus for? For some it will be social, seeking to forge friendships that will last a lifetime. Some will come back for collegiate study and group working. Access to specialist equipment and software is another powerful driver. Perhaps it will also be the in-person peer support that students will miss the most, from venting about workload to sharing detailed viewpoints on lectures. Extra and co-curricular activities can be delivered partly online and partly in-person too, but many of the more arts-based, sporting or social activities will be key to building community in the physical campus setting. One of the challenges facing providers is the increasing use of complex technological systems and programmes aimed at digitising the



student experience, with the rise of the ‘smart campus’ and virtual assistants becoming more prevalent in higher education, both in the UK and globally.

## A strategic approach to the ‘smart campus’

The smart campus – a university-wide programme to digitise a physical campus environment using digital technologies – is not a new concept, but it is one that can provide an ideal model for hybridisation. As with all strategies, the starting point should be a vision. For example, Deakin University in Australia has a [‘Smart Campus Strategy’](#) which aims to provide a smooth and seamless physical to digital experience for all campus users. As part of this project, the University ‘is on a journey to creating a campus that knows, guides and responds to the preferences, interests and needs of its campus users in a highly personalised manner’.



There is potential for deep integration with providers’ databases, bringing together timetables, resources, support networks, and established systems allowing access to physical resources like booking equipment and checking space in libraries online. Why have separate lanyards and passes, when every student has a Near Field Communication (NFC) enabled secure mobile device that can fulfil each function? NFC-enabled devices – such as laptops, tablets and mobile phones – allow sharing of data between them. NFC-connection is automatic and once in-range the devices instantly communicate and send prompts to its user. The challenge that strategies need to identify and resolve is to make this seamless, secure and integrated with aspects of hybridity like access to asynchronous learning materials.

Jisc has offered [adaptive learning case examples](#) from their intelligent campus project suggesting practical and simple ways to integrate mobile devices with technology to maximise the learner experience. Use of interactive digital books (see [BibliU](#)) that link interactive hints, explanations and practice questions, enhance student engagement with the learning material easily.

Co-curricular activities adapted to suit hybrid models use intelligent technology in many ways. Travelling without hefty airfare costs and reducing the carbon footprint is an added bonus in augmented reality or virtual field trips. Such experiences offer students an immersive tour of different countries and cultures, while also providing a collaborative and personalised learning experience. Virtually designed co-curricular activities enhance digital confidence in a playful manner that supports engagement with the wider curriculum in a sustained way.

Using different datasets in a collaborative and shareable way is key to defining what a smart campus might look like. Sources could include qualitative data from the physical experience of the campus user, learner analytics from virtual learning environments (VLEs), data from the library about availability of learning resources, and analyses of learning spaces. Digital insights on accessibility, security and safety can inform investments and decisions, helping to deliver innovative and differentiating solutions and experiences for all users. It can also help to personalise support or adjust learning design for students who may not be engaging well or have low levels of participation – actions which should be well-embedded already. But they can also help determine what will happen in the future, identifying patterns in changing student populations, responding with new course portfolios and content. Labour market data, for instance, can help identify the employers and industries with whom providers are engaging. Other intelligence from these two stakeholder groups can inform micro-credential development and the impact that can have on hybrid approaches.

Deakin University, however, raises a note of caution:

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...the most important thing is to not let the technology be the primary driver for your vision or end objectives. Take a collaborative organisational approach to exploring what your users (the students, staff and visitors who visit, engage and stay on campus) want and need, mix this with your organisational DNA and then identify how technology, people and process can enable a consistent, engaging experience.

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Depending on the extent to which providers wish to engage in hybrid models of delivery, ‘smart’ campuses will look and feel different for each higher education provider. Having an advanced virtual learning platform backed by intelligent technology will be key to making hybrid delivery a success.



## Some practical approaches to the smart campus

In the real world, the smart campus could help students navigate the campus site using an interactive map – a useful way to support and enable students with disabilities. Accessing information on upcoming workshops and social events could help students plan their day effectively, and support active participation. In the future, having a smart digital assistant on mobiles could help students to schedule social events, classes, and remind them of upcoming deadlines.

In 2017, Jisc wrote a [thoughtful primer for virtual assistants](#). In the same year, coincidentally, Deakin University launched their version – [Genie](#) – featuring deep integration with data sources such as student records, financial data, course and unit information, assessment data, library information and location data. Genie provides specific, personalised answers to the student, enabling them to proactively engage with studies and social life on and off-campus, and can help prepare graduates for a ‘post-digital’ future where chat bots and virtual smart assistants are likely to be more commonplace. By 2019, Genie was [handling over 12,000 conversations a day](#); the most common requests being for assignments, timetables and unit resources. Use of virtual assistants was also taking off in the UK, pre-pandemic: [Ask L.U.](#), Lancaster University’s digital assistant, based on Amazon web services and Alexa, launched in 2019 as did [Staffordshire University’s Beacon app](#).

The [Minerva Project](#) is an example of an enhanced VLE, using its platform [Forum](#) to offer programmes in partnerships with colleges and providers in a fully online and digitalised way. Using a ‘world as a campus approach’, the University operates as a network of seven satellite locations around the globe. All courses are offered online and teaching sessions cater to a small number of learners at a time. Despite the central role of video-based teaching, Minerva shapes a learning community built on pedagogical ideas which can be taught, applied and evaluated in an online environment. A campus with no walls does not mean that students miss out on social experiences. Instead, students are offered opportunities to meet in different cultures and countries.

## EdTech and strategy

Our dependence on digital communication systems, virtual learning platforms, access to learner analytics, cloud data storage, and forever connected devices highlight the pervasiveness of internet and technology in our decision-making in higher education. EdTech, as an industry that facilitates learning by leveraging digital technological processes and resources, is booming. Not only is demand for eLearning and remote proctoring solutions soaring, [blockchain technology](#) is now being used in Massive Open Online Courses (MOOCs) and ePortfolios. And the potential for virtual or augmented reality technology to be used in practical educational settings, such as medical procedures, or co-curricular activities such as [collaborative online international learning \(COIL\) projects](#) is vast. The time is right to focus attention on EdTech as part of the institution’s long-term strategy.



Although there are clear benefits of using EdTech and data evidence provided by it, it is not without its risks. Students are becoming concerned about increased surveillance, and sector bodies are seeing risks to personal information, and online security. The value of the information providers hold, together with their organisational complexity and reliance on legacy systems, make them highly-tempting targets. QAA and Jisc are currently preparing advice for providers on how to protect their systems from cyberattack, following [potential breaches at Australian universities](#) in early 2021.



In the long-term, digitising the physical campus environment will offer students a ‘smart, personalised, responsive and enriched campus experience’.<sup>2</sup> The transformation of the sector based on cloud infrastructure and artificial intelligence (AI) systems is gaining pace, yet it also highlights the ethical dilemma of computer coding student experience. As we imagine a post-pandemic university, critical discussions on the way algorithms and analytics ‘recode’ educational intent, and how surveillance culture can be resisted, demand attention. [The Manifesto for Teaching Online](#), by Sian Bayne and colleagues can inform strategic approaches and inspire thinking about teaching in online or hybrid environments. It attempts to switch the perception of online learning as the poor relation of onsite, instead positioning online as the more privileged mode. Online asynchronous, for example, gives an opportunity to ‘pause’ the activity – to think, reflect and absorb – you cannot press pause on a lecturer. Not easily, anyway.

Using EdTech tools, higher education providers could benefit from planning digitally-designed scenarios to evaluate how different types of learning models could work for diverse learners. This could also help mitigate the potential risk of including too much flexibility as students from ‘underrepresented groups are often uncertain about their choice of field, and too much flexibility in educational design could exacerbate this uncertainty’.<sup>3</sup> With future employers and workplaces becoming digitally smarter and efficient, providers will need to conceive a balanced approach that is viable, scalable and equally prepared to meet those needs.

With the understanding that different providers will have varying degrees of EdTech-enabled campuses, hybrid approaches will accentuate the transformational relationship between students, the knowledge they learn, and discipline-specific skills vital to the higher education ecosystem.

## In conclusion: an ecosystem of thought and design

There is no doubt that higher education will continue to evolve. Moving towards a future beyond the pandemic, it is important for us to recognise multiple possibilities of learning and teaching, and different ways in which students will participate in online, hybrid or hyflex studies. With smart campuses, and EdTech examples, the importance of students and providers as co-partners is a vital part of the wider social ecosystem. Hybrid/hyflex models offer different ways to build peer interactions, whether on-campus or in digital social groups, promoting student and staff agency and creating a stronger sense of connection.

There is agreement among providers that adopting a degree of flexibility in the delivery of education will build positive institutional agility in the long run. It is also clear that institutions will differ significantly in shaping their strategic outlook. The benefits of hybrid education are based on the balance of what works in the near future, and what will work better in the longer term. Designing models of hybridity is a journey that supports and enables students and staff to engage more proactively in the fabric of the learning experience.

As we look ahead, higher education is placed at the cusp of integrating technology and pedagogical philosophies in many different ways – some known and some yet to emerge. Whether our models of education are online, blended, hybrid, or hyflex – the common element in all of these is ‘learning’ and making that experience a high-quality, meaningful and fulfilling one for students remains the central priority.

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<sup>2</sup> Bonfield et al in Transformation or evolution?: *Education 4.0, teaching and learning in the digital age*

<sup>3</sup> Orr et al cite works by Hauschildt, Vögtle & Gwosć, in *Higher Education Landscape 2030*

## QAA Membership 2021-22: What's next

Our [Membership offer for 2021-22](#) has five interconnected themes: beyond COVID-19 - the future of digital and hybrid learning; creating inclusive learning communities; global engagement and TNE; evaluation and data-based decision-making; and securing academic standards. Throughout the course of the year, we will engage with Members and other stakeholders to explore experiences of hybrid pedagogy and best practice in supporting the student experience. We will spark conversations and generate points of reflection to benefit the sector. Details of specific opportunities are provided in the [Membership programme](#), they include the Pro-Vice-Chancellor (Education) breakfast briefings, the Academic Symposium in November, and our Quality Insights Conference in February 2022.



## Useful additional resources

*The Ecological University: A Feasible Utopia* by Ronald Barnett

[www.routledge.com/The-Ecological-University-A-Feasible-Utopia/Barnett/p/book/9781138720763](http://www.routledge.com/The-Ecological-University-A-Feasible-Utopia/Barnett/p/book/9781138720763)

*Towards the Ecological University: A Concept Note from Ronald Barnett*

<https://ronaldbarnett.co.uk/Futures%20Project%20-%20concept%20note.pdf>

What is a Smart Campus?

<https://futured.deakin.edu.au/what-is-a-smart-campus>

When is a campus not a campus? When it's a micro-campus

<https://wonkhe.com/blogs/when-is-a-campus-not-a-campus-when-its-a-micro-campus>

*Ecologies for Learning and Practice*

[www.google.co.uk/books/edition/Ecologies\\_for\\_Learning\\_and\\_Practice/](http://www.google.co.uk/books/edition/Ecologies_for_Learning_and_Practice/C628DwAAQBAJ?hl=en&gbpv=1&dq=ecological+university+barnett&pg=PT13&printsec=frontcover)

[C628DwAAQBAJ?hl=en&gbpv=1&dq=ecological+university+barnett&pg=PT13&printsec=frontcover](http://www.google.co.uk/books/edition/Ecologies_for_Learning_and_Practice/C628DwAAQBAJ?hl=en&gbpv=1&dq=ecological+university+barnett&pg=PT13&printsec=frontcover)

*Higher Education Landscape 2030* by Dominic Orr, Maren Luebcke, J. Philipp Schmidt, Markus Ebner, Klaus Wannemacher, Martin Ebner and Dieter Dohmen

[https://doi.org/10.1007/978-3-030-44897-4\\_3](https://doi.org/10.1007/978-3-030-44897-4_3)

*Technology-enabled teaching and learning at scale - A roadmap to 2030* by Jisc and Emerge Education

<https://repository.jisc.ac.uk/8405/1/technology-enabled-teaching-and-learning-at-scale-report.pdf>

*Theorising hybrid lifelong learning* by Rikke Toft Nørgård

<https://doi.org/10.1111/bjet.13121>

Transformation or evolution?: Education 4.0, teaching and learning in the digital age by Christopher Alan Bonfield, Marie Salter, Alan Longmuir, Matthew Benson & Chie Adachi

<https://doi.org/10.1080/23752696.2020.1816847>

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