



THE UNIVERSITY OF LEEDS

THE SENATE

Growth of fully online education provision

The Senate is invited to consider and approve this academic strategy for growth of fully online education provision. Earlier drafts of this paper were supported at the University Executive Group and Leadership Forum. This document has been endorsed by the Taught Student Education Board.

Introduction

1. The University of Leeds is a large, civic, research-intensive university that delivers high quality research-based education using a blended learning approach to support on-campus undergraduate and taught postgraduate students. The University's 2020-30 strategy will maintain and enhance this commitment to excellent on-campus face-to-face (in person) educational experiences, supported by effective use of digital and online learning to enrich students' learning and experience.
2. The global coronavirus pandemic necessitated an emergency move to a fully online or hybrid learning experience for students who registered for an on-campus programme. This is a short-term measure that will be phased out as soon as social distancing guidance is revised, and students registered for campus-based degrees will experience a blended learning approach: initially based upon inclusion of the best practices that have been developed during the pandemic and ultimately in line with the vision expressed in the curriculum enhancement project.
3. Whilst the vast majority of the University's taught degree programmes are campus-based, there are also a number of fully-online programmes available to taught postgraduate students. These programmes are either parented and taught within Faculties or have been developed as part of the Leeds-Pearson partnership, established in 2016.
4. The University's Digital Transformation Strategy sets out objectives to enhance the quality of the education and experience for students studying on campus and online through effective use of digital technologies, data and digital approaches, and sets out an objective to grow the portfolio of fully online education provision.
5. This paper sets out the strategy for growth of the university's fully online research-based education portfolio, to be developed alongside the existing campus-based taught programme portfolio, and to support the global demand for higher education and lifelong learning to meet the pressing global economic, environmental and social challenges facing society.

Context

6. The demand for tertiary education is growing rapidly, both in the UKⁱ and globallyⁱⁱ, within all groups, including undergraduate, postgraduate and professional learners. This demand cannot be met solely by physical growth of existing universities, or creation of new physical universities, and growth of online education provision will form part of the solution to this challengeⁱⁱⁱ. Currently, fully online education provision is mostly limited to taught postgraduate degrees, but is also increasing in the foundation, undergraduate and professional domains. In addition, there is large growth of the sub-degree qualification market (e.g. short courses^{iv}, micro-credentials^v, postgraduate certificates and diplomas),

largely fuelled by online learning platforms, and demand for flexible, lifelong learning opportunities from professionals seeking upskilling and reskilling in an uncertain employment market^{vi}.

7. There is growing acceptance of fully online degrees, and other online qualifications and certificates, within governments and employers globally, including in India and the Middle East. The UK Government have signalled a need for significant growth of lifelong learning opportunities^{vii}, and a recent Universities UK report shows strong demand for sub-degree qualifications or micro-credentials from individuals looking to upskill and reskill^{viii}. The Government's 2021 White Paper 'Jobs for Skills'^{ix} makes specific reference to funding available for individuals to engage in upskilling and reskilling through short, modular, courses.
8. Advances in educational technology and online teaching and assessment approaches means that the range of disciplines that can be effectively taught and assessed online has expanded, such that medical and health^x, science and engineering topics are increasingly being provided as online provision, alongside business, arts and humanities, environmental and social science disciplines^{xi}.
9. Leading universities around the world have begun to respond to the demand for higher education qualifications through growth of online education provision, particularly on online learning platforms such as Coursera, FutureLearn and EdX. These platforms, which originated to meet the demand for massive open online courses in the 2010s, now have around 120 million registered users between them, and have moved rapidly towards offering accredited degrees, sub-degree qualifications and professional courses, in partnership with universities, private companies and other organisations. In the UK, Coventry University has the largest portfolio of online degrees on the FutureLearn platform^{xii}, some of which are offered in partnership with Deakin University in Australia, with learners able to mix and match courses from either university to create qualifications.
10. A number of research-intensive US universities have portfolios of online degrees on the Coursera platform, including Arizona State University, University of Illinois and University of Michigan, all of which are composed of stackable credentials that can be studied flexibly and compiled into degree level qualifications. These universities have fully online provision offered via a range of approaches, including use of online learning platforms, such as Coursera. Arizona State University has seen massive growth in fully online student numbers – rising from 400 to over 30,000 students studying on 150 undergraduate and postgraduate online degrees since 2016^{xiii}. The majority of these degrees are offered directly by the University, using their internal virtual learning environment, and are taught and supported by their academic and professional staff.

Current situation at Leeds

11. The University of Leeds has a strong, and long-standing reputation for delivery of research-based online courses on the FutureLearn platform, and has developed over 100 online short courses that have reached around 2.5 million learners from 170 countries, thus generating very significant global reach. The majority of these courses are not accredited, and are aimed at pre-university students, working professionals and lifelong learners. The University's fully online accredited education portfolio consists of primarily faculty-based relatively small postgraduate degrees, and an emerging portfolio of large-scale fully online programmes created within the Leeds-Pearson partnership.
12. The first of these taught postgraduate programmes, MSc Engineering Management^{xiv}, created in partnership between the Faculty of Engineering and Physical Sciences and the Digital Education Service, has enrolled over 200 new students since launch in September 2019, through the marketing and recruitment efforts of Pearson Education. The students registered on this programme are primarily internationally-based professionals seeking a Masters qualification that can be obtained whilst working and

without the need to relocate to the UK. The Leeds-Pearson partnership is a good route to pursue development of new research-based industry-facing Masters programmes with a large international market of professionals who do not have an association with the University.

13. As a result of the global pandemic, many businesses are moving to online professional learning (CPD) for their employees, as a result of the need for upskilling and reskilling. The University has a small portfolio of professional learning provision, mostly available as face-to-face opportunities^{xv}, and is not making the most of its research expertise or excellence in education and online learning to meet the large market demand. There are many opportunities to create large-scale online professional learning courses, based on our research expertise, for delivery on the Coursera and FutureLearn platforms, both of which have growing portfolios of 'For Business' courses created specifically for employees of corporate organisations^{xvi}.
14. The University also has a small portfolio of Degree Apprenticeship programmes^{xvii}, delivered on-campus and online, and these are proving popular with companies and organisations keen to use their apprenticeship levy to upskill employees. The University should support broadening of the education and training available to individuals through growth of this portfolio.
15. The University has been working to evolve its cohort mix for a number of years, in an effort to reach its ideal size and shape, and provide a high quality experience relative to the physical resources available on campus. The consensus is that the undergraduate population of campus-based students should be reduced in size, whilst the populations of taught postgraduate students, and postgraduate researchers, should be increased. Whilst there were early signs of positive movement in this direction, particularly in growth of the international postgraduate taught cohort, the global pandemic has created risks to this strategy, in terms of the continued growth of the UG cohort, and reduction of the international PGT cohort. It is unlikely that this trend is going to be easily reversed in the next few years, and the consequences of this cohort mix are creating financial challenges for the university.
16. Given the limited number of options available to the university to generate financial headroom to replace this potential loss of income, there is a significant strategic imperative to grow the fully online education portfolio for learners seeking accredited learning, Masters degrees and professional learning (CPD). Whilst some areas may feel it will be possible to close this revenue gap through programme redesign to enable greater numbers of students to study on-campus (e.g. by removing large group lectures and module caps), this will not help to realise the university's long-term strategy to grow its fully online education provision, and places risks on a single source of student income.

Growing our fully online education portfolio

17. The growth of fully online education provision will realise the University's ambition to support the global demand for higher education and lifelong learning, and to meet the pressing global economic, environmental and social challenges facing society. This will be achieved via a range of flexible online learning opportunities to support individuals seeking academic qualifications and professional certificates, to enable upskilling and reskilling in an uncertain global employment market.
18. There are a number of routes for the University to grow the fully online cohort, depending on the audience, market and level of award. There are three (inter-related) levels of award that have viable global markets: (i) Taught Postgraduate Masters degrees; (ii) Sub-degree qualifications (e.g. micro-credentials); (iii) Professional Learning courses (with relevant endorsement).

19. To enable these routes, the University will build collections of new provision (full Masters degrees, modules as stand-alone credit-bearing courses and short courses for professional or lifelong learning), based on its research strengths and aligned to market demand, that exemplify the strategy to maximise reach and access.
20. There are additional strategic benefits in the creation of these collections. All of the content and learning materials created as part of these new degrees and courses will be owned by Leeds and will also be used for: (i) enhancing blended learning for on-campus students; (ii) providing free open educational resources to support global lifelong learning; (iii) developing degree apprenticeships, (in partnership with business) and technical courses (in collaboration with business and other education providers);(iv) other online education initiatives, as they arise.
21. This strategy will engage many of the University's researchers and teaching staff who will be involved with creating active, engaging, online learning; these new skills will be valuable to support staff upskilling in digital literacy.
22. As part of this activity, the University will make clear its approach to licensing digital resources, to ensure that contributors' rights as authors are attributed to content and that re-use and re-purposing of content is clear at the outset, in line with the University's position on Open Educational Resources^{xviii}, whilst maintaining the University's position on Intellectual Property Rights^{xix}.
23. The University will ensure that Faculties and Schools are properly resourced and incentivised to develop and deliver fully online education provision.

Taught Postgraduate Masters degrees

24. There are three mechanisms by which the University can create fully online research-based Masters degrees, depending on the circumstances, particularly the audience, market and availability of current provision. These are: (i) Fully online version of existing degree programmes; (ii) New fully online programmes created through Leeds-Pearson partnership; (iii) New fully online programmes created in partnership with Coursera or FutureLearn.

(i) *Fully online version of existing degree programmes* – A number of our Taught Masters programmes are over-subscribed, and turn away well qualified applicants due to physical and resourcing constraints on campus. A proportion of these applicants (and others who can be reached by marketing activities) may be willing to study with the University via fully online means at an appropriate price point (to reflect the offer available), particularly with flexible start dates, and they are known to us, and committed to the University's reputation. As a result of the emergency move to online or hybrid delivery, online learning materials are available for all taught programmes, and these can be used as a basis to create materials for fully online versions of programmes (with support from the Digital Education Service, as required). In principle, fully online versions of some popular taught Masters programmes (e.g. in LUBS, AHC and FSS) could be created rapidly for recruitment, with the appropriate resources, support and prioritisation. These programmes would be taught within Minerva, and using all of the University's services, and the student fee will flow to the Parent and Teaching Schools through the existing resource allocation model. These programmes may also be delivered in a hybrid mode and include some optional on-campus face-to-face activities (e.g. summer school), where appropriate.

(ii) *New fully online programmes created through Leeds-Pearson partnership* – A pipeline of proposals for new research-based interdisciplinary fully online programmes are required for our long-term strategy to significantly grow the fully online cohort of taught postgraduate students. This approach is ideal for propositions where we have distinctive research strengths that can be translated into large-scale (appropriately priced) programmes for working professionals who require a qualification to upskill or

reskill in specialised professions. The partnership with Pearson is ideal where we are looking to create a market for new propositions, as they focus on marketing and recruitment activities in relevant international markets. These programmes are taught within Minerva, and created in partnership between Faculties, Schools and the Digital Education Service, who manage the partnership with Pearson Education. In this model, the Teaching Schools are funded to cover academic time for design, development and teaching and assessment, and receive a proportion of the student fee, and all content production and administration is managed by the Digital Education Service, central Student Education Service teams and Pearson, to ensure a consistent and efficient approach.

(iii) New fully online programmes created through Coursera or FutureLearn partnership - Leeds has strong partnerships with the online learning platforms FutureLearn and Coursera, providing further (alternative) pipelines for new research-based interdisciplinary fully online programmes. This route is appropriate for developing and delivering large-scale programmes that will be delivered on FutureLearn or Coursera (depending on the discipline and alignment with platform user base), and marketed by our partners internationally. Content will be created in partnership between the Faculty, School and the Digital Education Service, who manage the partnerships with online learning platforms. In this model, the Teaching Schools are funded to cover academic time for design, development and teaching and assessment, and receive a proportion of the student fee, and all content production and administration is managed by the Digital Education Service and central Student Education Service teams.

Sub-degree qualifications (e.g. micro-credentials)

25. In the models for full online degrees described above, there are many opportunities to re-purpose content from courses for delivery on online learning platforms as stand-alone accredited courses (e.g. micro-credentials). Development of micro-credentials alongside creation of a fully online degree provides an opportunity to showcase our research expertise to global audiences, and serves as a recruitment funnel for full online, or campus-based, degrees. High demand for standalone courses can also demonstrate the need for new full degrees, using the large user base on the online learning platforms to 'test the market'. Standalone courses presented as micro-credentials for academic credit are an opportunity to generate additional revenue for the university, at relatively low cost. There are strong indications that the market for micro-credentials will grow significantly over the next few years as working professionals seek regular upskilling and reskilling, and industry facing courses addressing skills gaps are likely to be in high demand^{xx}.
26. Given the academic credit associated with these courses, they offer flexible opportunities for learners to build up credit for a full online degree, particularly where courses can be accumulated from multiple universities. With the appropriate changes to our admissions and accreditation of prior learning policies, the University of Leeds could become a global innovator in the accreditation and award of fully online degrees composed of individual courses studied at multiple universities. These courses can also be used as part of on-campus blended learning provision, and can also be used towards new Degree Apprenticeships awards. Arrangements for funding the development and delivery of these courses will be discussed and agreed with Faculties and Schools, to meet local needs. Faculties and Schools will receive income generated by these online courses.

Professional learning courses (with relevant endorsement)

27. There are many opportunities to create industry-facing online learning courses for professionals, with industry endorsement, for delivery on online learning platforms within their 'For Business' collections. These courses can be created from content within the models above, and endorsed by relevant professional bodies or the University. Our professional learning offer will need to be focussed on large-scale online provision to be financially sustainable. Arrangements for funding the development and delivery of these

courses will be discussed and agreed with Faculties and Schools, to meet local needs. Faculties and Schools will receive income generated by these online courses.

28. We envision a market-leading, mission-driven professional learning offering that drives societal life-long learning, global impact and dissemination of research and education excellence. We will deliver high-quality research-based or evidence-informed professional education and training for professional learners locally, nationally, and globally. Our approach will be flexible, utilizing a variety of delivery methods to generate revenue while developing long-term partnerships and boosting research dissemination and impact.
29. We aim to reach a global audience of lifelong learners and organisations in search of educational content that has impact. We plan to position our mission-driven offer around our strengths in addressing the most pressing global challenges: current and emerging. In this way, we will leverage our unique combination of excellence in core disciplines such as health, business, bioengineering, data analysis, life and society, and climate change and sustainability. This offering will build further expertise in areas where the University is already well established and contribute to the broader University Strategy.
30. Our professional learning operating principles will ensure an offering that is: rooted in academic excellence; distinctive and aligned to our expertise; quality assured and accredited; responsive to market demand; financially sustainable; provides high quality learner support, experience, and service; developed efficiently; and delivered in the most appropriate mode.
31. To build a market-leading offering while establishing our reputation in the professional learning space, we will develop a market-driven offer that matches our online course portfolio and academic capabilities to market demand. We will begin by repurposing and leveraging existing assets and learner bases to their full potential through modalities that show product-market-fit. We will partner with regional businesses and universities to create tiered professional learning offerings. Through this approach, we could become a regional hub for professional learning for local and global learners. We will further leverage our international partnerships to deliver professional learning through partnerships with external providers, industry partnerships or in relationship with other universities where strong synergies exist. Finally, we will test new offerings and modalities to fill market gaps and sustain growth.

Summary

32. There is global demand for Higher Education provision that cannot be met by expansion of physical universities, and growth of fully online provision is an opportunity for the University to support the major global challenges facing society, protect against fluctuations in demand for campus-based learning and to generate additional revenue.
33. The University of Leeds is perfectly placed to offer a research-based portfolio of fully online education opportunities alongside its existing campus-based (increasingly-blended) learning provision, to deliver the vision articulated in the new academic strategy.
34. There is growing demand for fully online degrees, online sub-degree qualifications and online professional learning within many sectors, as a result of the need for upskilling and reskilling. The University has a number of mechanisms available to provide fully online provision to meet this global demand, depending on the audience, market and type of content required.

Action plan

35. To realise this strategy, actions have been identified that are currently ongoing or planned. A summary of these actions and status, as at 12/02/2021, is provided below:

Action	Owner	Timescales	Update
Pursue plans for large-scale fully online degrees within Schools/Faculties.	Digital Education Service Marketing Faculties	On-going	Work continuing to develop the fully online programmes/degrees pipeline for Leeds-Pearson programmes. Extending to include opportunities for Leeds-Coursera, Leeds-FutureLearn and Leeds programmes.
Develop policy position around re-use and re-purposing of digital resources.	DVC: DT	March 2021	Draft policy defined and published for University-wide consultation before committee stages.
Develop pipeline of high-volume revenue generating online CPD courses, through market-research, for delivery on external platform and working closely with industry accredited bodies to support these CPD courses.	Digital Education Service Faculties Marketing	On-going	DES is responding to immediate requirements and supporting through discussion and mutually agreed approach.
Develop commercial agreements between Leeds, Pearson and FutureLearn / Coursera to increase use of Leeds' externally-facing online courses with employers.	DVC: DT	March 2021	
Develop partnership with Futurelearn and Coursera to include academically-accredited stackable credentials, and develop pipeline of courses.	DES	March 2021 On-going	Conversations ongoing with Coursera. Four Expert Tracks live on FutureLearn by March. Initial meeting to explore the FutureLearn approach to full degrees.
Investigate global perspectives on online learning – to clarify any potential barriers in particular territories, and keep track of any changes in these barriers over time.	DES	On-going	
Develop a mechanism to collate requests for new programmes and a process to determine most suitable approach.	DES Marketing	March 2021	Draft process defined, to be discussed with Faculty Marketing Managers and Faculty Portfolio Managers.
Develop full business case for all fully online education provision.	DVC: DT	March 2021	On-going and for discussion at the UEG
Investigate options for improving efficiency of SES and course delivery processes to reduce costs of delivery at scale.	DES	Ongoing	Workshop planned with DES team to identify current blockers to operating at scale. Actions for cross-institutional attention identified at DES Annual School Review.

Next steps

Faculties and Schools are asked to commence planning to grow the university's online education provision. Confirmed plans should come through the IPE process.

- (i) Colleagues in Faculties, Schools and Digital Education Service to scope the feasibility of creating online variants for popular Masters programmes, to be delivered, resourced and funded as described above, for rapid launch and delivery.
- (ii) Faculties and Schools to bring forward a pipeline of new, large-scale Masters programmes for delivery on internal or external platforms, in partnership or alone.
- (iii) Faculties and Schools to commit to the strategy of creating modules from these fully online degrees (as stackable modules) on external platforms.
- (iv) Faculties and Schools to commit to a strategy of creating short-courses and professional learning courses, for lifelong learners and professionals.

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References

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