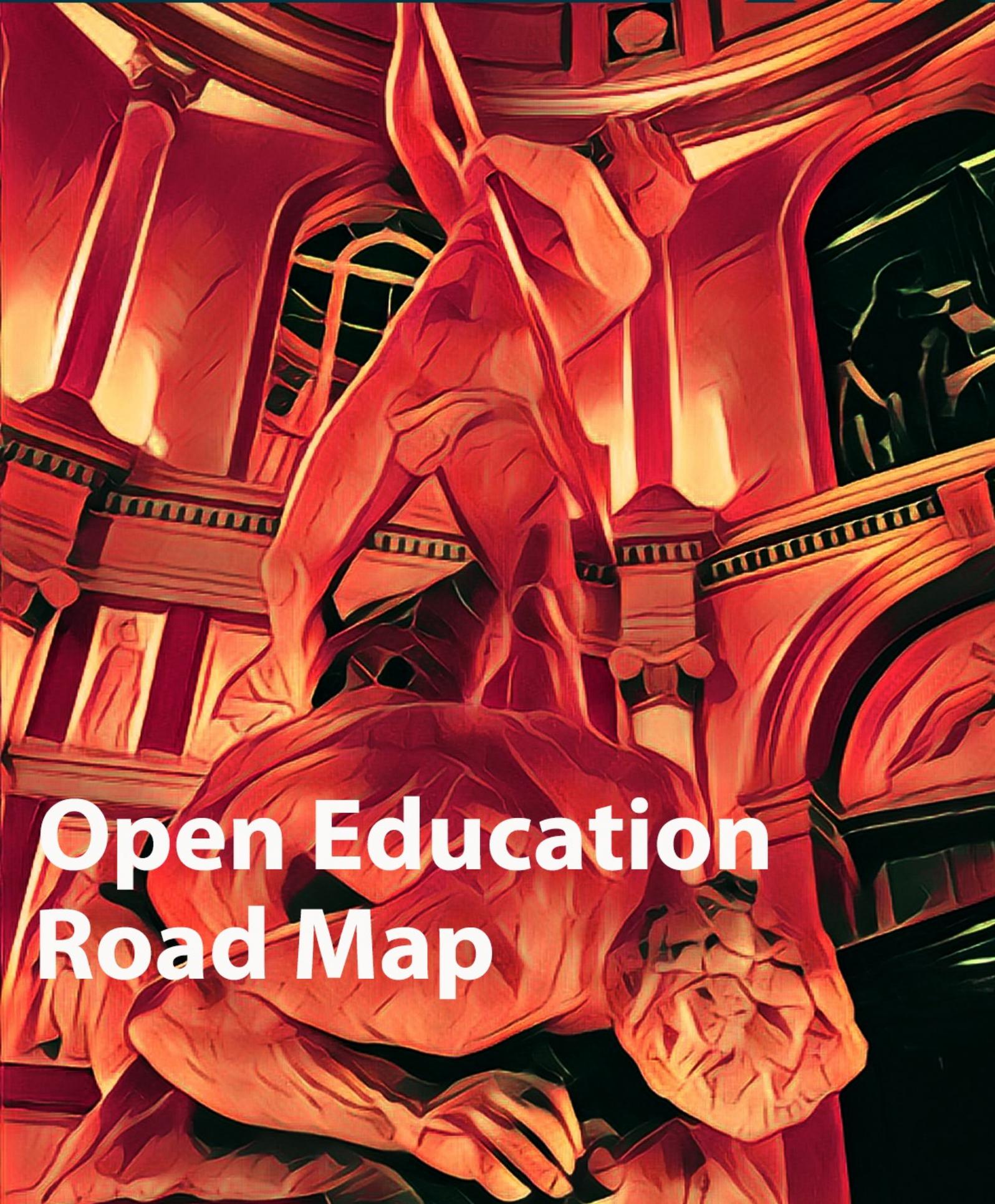


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ISE

Open Education Road Map



EXECUTIVE SUMMARY

Open Education (OE) is now recognised as a new and challenging activity for UCL, attracting sizeable and growing interest across the institution but also genuine concerns about purpose, capacity and impact. This *OE Road Map* was inspired by UCL academics who, during a 2016 scoping study, asked for a UCL-specific OE vision that aligns clearly to our mission and provides better strategic cohesion, institutional recognition and practical support.

The Road Map attempts therefore to contextualise OE within broader academic practices around openness, which are already well developed at UCL, and to focus on practical outcomes and benefits for the university. In order operationalise OE at UCL, the OE Road Map also proposes seeking funding from the Provost's Strategic Fund for a new project *Open@UCL* to build on current initiatives and enable these approaches and processes to become mainstream.

The OE Road Map describes five stages, starting with the OE Special Interest Group in 2016 that resulted in the aforementioned *Initial Scoping Study* that identified widespread interest in OE. That initiated a successful proposal in 2017 to pilot and evaluate an OER Repository service, due for testing 2017/18. In parallel the current OE Road Map was commissioned to focus on the wider strategic, policy, community and educational components in order to ensure OE has institutional-wide impact and sustainability.

The OE Road Map proposes a two-year project *Open@UCL* to start in 2019/20 to build on the Repository pilot, establish a strong business case and eventually embed the new approaches and processes as a full OE service appropriate to UCL, supported by ISD and Library colleagues.

The OE Road Map identifies four components to success to complement the OER service described above:

1. Evaluated case studies to provide an academic context and rationale;
2. Formation of a cohesive OE strategy;
3. Establishment of a community of practice;
4. Development of a portfolio of policies and guidance.

The importance of Library and ISD Digital Education teams to support the OE Road Map is emphasised and to implement the challenging work plan it is recognised that dedicated project resource will be required, suggested as a 0.5 post over two years £100,000 split over 2019/20 and 2020/21.

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1. OPEN EDUCATION AT UCL – TOWARDS A ROAD MAP

1.1 STRATEGIC CONTEXT

This document is a response to the strategic commitment to Open Education Resources (OER) expressed in the Education Strategy and ISD Digital Masterplan and makes recommendations to develop UCL's activity in this area.

- **The Education Strategy 2016–21** (Objective 7) states that by 2021; *We will have introduced an open education resources (OER) service to provide a showcase for UCL education and for student-generated content, and to bring together internal resources of common interest in support of the connected curriculum.*
- **Objective 1 of the ISD Digital Masterplan** (2016 update) aims to improve the student digital experience. Under *Digital Education - open and life learning* it states; *We will develop our open educational presence, establishing an open educational resources (OER) repository to share and showcase our educational outputs.*

Open Education is recognised as a new and challenging concept for a university, raising understandable concerns among academic colleagues about purpose, capacity and impact. This document attempts to contextualise and align the initiative within broader academic practices around openness, already well developed at UCL, and to focus on practical outcomes and benefits for the university. In order to show how Open Education may be operationalised at UCL, the document outlines a work plan and a new project - *Open@UCL* - that will begin to trial, evaluate and implement open education processes and services in the form of a suite of costed work packages.

1.2 OPEN EDUCATION INITIAL SCOPING STUDY (2016)

In 2016 the UCL Open Education Special Interest Group (OE-SIG) was established and commissioned the *Open Education Initial Scoping Study* to investigate the opportunities, capacity and enthusiasm for open education at UCL. The study reported sizeable and growing interest in open education across the institution and recommended the development of an open education strategy that supports and adds value to the mission and vision of the university.

The study was presented to UCL's Open Science Working Group in early 2017, which recognised that investment and piloting would be needed to progress open education at UCL. It was suggested funding should be sought from the Provost's Strategic Fund and to this end, the OE-SIG has prepared this document, an "Open Education Road Map" to outline a potential direction of travel for UCL in the form of *Open@UCL*, a costed project proposal.

1.3 OER REPOSITORY PILOT (2017)

To explore the technical implications, the OE-SIG recommended the development of a technical proposal to the ISD Education Domain, which was approved in May 2017. The *Open Educational Resources (OER) Repository* project is now underway and will pilot, test and evaluate a specific technical framework for OERs at UCL.

1.4 OPEN EDUCATION ROAD MAP (2017)

The OE Road Map proposal builds on and amplifies the *OER Repository Project*, focusing on the wider strategic, policy, community and educational components in order to ensure the initiative has institutional-wide impact and sustainability. The OE Road Map also recognises that 'open education' is wider and may potentially be more impactful than OER.

1.5 MAKING THE CASE

Engagement with the UCL academic community during the *Open Education Initial Scoping Study* uncovered concerns about the purpose, capacity and impact of Open Education. This section highlights some of these questions but the ethos of this Road Map is to engage with these issues through piloting and review..

One key tension is in the way Open Education is often defined as an ideological or moral imperative, for example; *...a mode of realising education, often enabled by digital technologies, aiming to widen access and participation to everyone by removing barriers and making learning accessible, abundant, and customisable for all* (OpenEdu project wiki, 2017). While many UCL colleagues may be sympathetic to this spirit, any proposals need to be balanced by day-to-day practicalities and acknowledgment that Open Education is only one of several competing educational initiatives.

That said, pragmatism should not limit ambition. There is already a well-established worldwide drive to encourage sustainable educational development across the field of open education encompassing elements of open research, open practice, open data, open access and OERs. As this becomes a prerequisite for funding, initial ethical drivers shade into practical benefits as our academics begin to engage with open research and educational communities. The *Initial Scoping Study* confirmed UCL is already active across many of these areas, but participants noted a lack of strategic cohesion, institutional recognition and therefore support.

Although the main focus of the OE Road Map is OER, the vision of Open Education at UCL is grounded in the wider open science/open scholarship agenda. Openness as both a principle and practice clearly align with UCL's mission as London's global university. This is exemplified by the UCL Library, which has established UCL as a leader in open access publications. UCL Press, launched in 2015 it is first fully Open Access University Press in the UK and open access is seen as an opportunity to UCL, not a threat.

1.6 THE UCL EDUCATIONAL CASE FOR OPEN

UCL's Education Strategy, and especially the Connected Curriculum has an emphasis on engagement with the wider academic community and society. Dimension three in particular specifies students making connections across subjects and out to the world *in line with UCL's commitment to making an impact for good in the world [and] explore concepts of global citizenship*. Dimension Six also encourages students to learn to produce outputs directed at an audience and students may wish to create and publish such outputs as OERs. One example is the engagement of UCL students with editing the Wikipedia.

In addition to supporting the Connected Curriculum, OER supports UCL's ambition of being world-leading in digital education by 2034, improving the student digital experience by providing a high quality by technology-rich blended environment for student study. Academic colleagues already routinely use external resources in programmes, others encourage student engagement with, for example, data hackathons and Wikimedia. In this sense OER and Open Education is a natural extension of current teaching and learning practices.

1.7 DEGREES OF OPENNESS

'Open' is usually assumed to be an undifferentiated descriptor i.e. 'open to the world' as exemplified in the definition quoted above, *freely accessible, openly licensed resources*. The *Initial Scoping Study* however suggested a far more nuanced concept of open among UCL colleagues, who recognised that there are actually 'degrees' of open. Academics often expressed a more modest ambition 'open to UCL' with only restricted access from outside. This resonates with the Connected Curriculum notions of internal UCL connections across programmes, disciplines and years and additionally responds to a longstanding demand by students (often appearing in surveys) who wish wider access to UCL online resources, beyond the 'silos' of their specific programme of study. From an educational development and design perspective, such internal sharing could also encourage sharing of teaching practices and resources across subjects.

1.8 LEADING ROLE IN OER AND OPEN EDUCATION TECHNOLOGY

In addition, with policy and strategic developments, UCL is also leading in research aspects of OER with a breakthrough EU H2020 project named X5GON, creating a solution that will introduce Artificial Intelligence (machine learning, machine translation, etc.) in the OER agenda at UCL and help deliver value. This also builds on the idea that, concerns about the purpose, capacity and impact of Open Education at UCL can only be resolved by via implementing the Road Map, piloting and evaluating in every possible aspect in the specific UCL context.

In 2018 X5GON will pilot its system on top of the OER repository to show off the value of the technology developed within the project and hence provide feedback to both the technology development, overall design methodologies and the business opportunities in the Road Map.

This pilot will take the materials in the OER repository and adapt them to the UCL student's needs and learn how to make ongoing customized personalisation along recommendations and suggestions through a truly interactive and impactful learning experience. The new AI-driven platform might deliver OER content *from* UCL and *to* UCL, for the students need at the right time and place.

The practical implications of the X5GON pilot for the OER repository are the following:

- **Aggregation:** It will gather relevant content in one place, from UCL's OER repository and Moodle intranet and external providers and other preferred resources.
- **Curation:** Using AI and machine learning will be key to curate relevant and contextual content to UCL and external students at the right time and point of need.
- **Personalization:** It will make increasingly personalized recommendations for learning content to suit a student's needs, based on the analysis of many factors.
- **Creation:** Outside of UCL small, medium and large-sized universities have tacit knowledge that can be unlocked and re-used. This approach will allow any

organization to release and build their own content libraries quickly and conveniently to share with UCL and vice versa.

2. THE UCL OPEN EDUCATION ROAD MAP

2.1 FIVE STAGES OF THE OE ROAD MAP

As we have seen, UCL is already active and committed to open education, the OE Road Map therefore simply aims to provide more strategic cohesion, institutional recognition and, though the Open@UCL proposal, supported implementation. The OE Road Map describes five stages and five components.

Phase	Stage	Description	Status
#1	Scoping (2015/16)	Formation of the Open Education Special Interest Group (OE-SIG) and Initial Scoping Study (2016)	<i>completed</i>
#2	Mapping (2016/17)	OE Road Map , including Open@UCL proposal	<i>completed</i>
#3	Technical Pilot (2017/18 and 2018/19)	OER Repository , project pilot technical implementation and evaluation	<i>in progress</i>
#4	Open@UCL (2019/20 and 2020/19)	Open@UCL , two-year project-to-service initiative to establish an implementation of open education appropriate to UCL	<i>proposal in draft</i>
#5	Full integration of OE (2020 and beyond)	<i>Open education is business as usual</i>	<i>planned</i>

2.2 FIVE COMPONENTS OF THE OE ROAD MAP

The five components of the Road Map were identified as objectives in the *Initial Scoping Study*, and provide cohesion between the OER Repository project, the proposed *Open@UCL* project and the continuing support activities of professional services staff, especially in UCL Library and UCL Digital Education.

1. **Specify, investigate, evaluate and pilot an Open Education Resources (OER) service to provide a showcase for UCL education and for student-generated content:** This will operationalise the service proposed in the Education Strategy, and will be piloted, evaluated and rolled out as a full service during by 2020. Part of the project will be to investigate integration with existing and planned services Moodle, UCLeXtend and MediaCentral. The *OER Repository* project will pilot and evaluate an initial technical implementation during 2017/18 and 2018/19 with the full service implemented by Open@UCL.
2. **Pilot departmental and/or thematic case studies to understand the potential and limitations of Open Education (OE) implementation in a UCL context:** A set of pilot studies involving impact analysis, development of the value proposition/business case and investigation of incentives in order to provide evidence based practical implications for a commitment to OE in terms of workflows, practices and technologies. The *OER Repository* project will initiate this with partner academics in 2017/18 and 2018/19 and

the pilot will be expanded via Open@UCL. Note in order to broaden the impact of the activity, other open platforms will be investigated e.g. a pilot around student use of Wikimedia inspired by the 'Wikimedian in Residence' approaches at Oxford and Edinburgh Universities.

3. **Develop an integrated strategy for UCL Open Education:** Develop an overarching and holistic opening up strategy, starting with 'open to UCL' and building to 'open to the world'. This will be integrated with the mission and vision of the university, and explicitly aligned to existing research, education and digital support structures and provision.
4. **Establish a collaborative community of practice in UCL Open Education:** The current Open Education SIG should be developed and encouraged to establish a collective community stance to help inform future decisions and planning.
5. **Create a portfolio of Open Educational policies:** UCL will create a set of integrated policy recommendations and guidance for OER and Open Education, covering issues such as Copyright, QA and IPR.

2.3 GOVERNANCE AND NON-PROJECT SUPPORT

To ensure cohesion across the various components it is recommended an OE Road Map Steering Group will be established to report to the Open Science Policy Platform, chaired Dr Paul Ayris as Pro-Vice-Provost in the Office of the Vice-Provost (Research). One of the early tasks of this Group will be the establishment of performance indicators for the project and a regular reporting schedule.

On a day-to-day basis the OE Road Map, the OER Repository and Open@UCL will be supported by a programme of advocacy and communication from UCL Digital Education and the UCL Library, drawing on the latter's previous successful experience of championing Open Access to research and the former's established E-Learning Champion and Faculty networks. These teams have considerable expertise.

UCL Library Services runs UCL Discovery, UCL's Open Access research repository, and UCL Press. The Library already provides support on the (inadvertent) use of copyrighted material, a recognised risk with OERs. Guidelines for academics and specific QA processes and workflows drawing on the Library's experience of managing Open Access to research will be drawn up to minimise this risk. Likewise, the Digital Education teams will work with the participants with provide advice and guidance on the pedagogic as well as technical aspects of producing OERs.

3. INDICATIVE COSTS

- **Current investment:** The OER Repository pilot, focusing on the implementation of the technical OER platform and testing the immediate support processes, has been funded by the ISD Education Domain for £100,000 (2017/18).
- **Proposed Open@UCL investment:** The Open@UCL project focusing on the wider strategic, policy, community and educational components of the OE Road Map will require a further £100,000, the equivalent of half-time grade 8 post spread over two years plus consumables, marketing materials etc.

4. NEXT STEP

The Open Science Working Group is invited to review the plans for development of the OE Road Map presented in this document and to advise on the proposal to seek funding from the Provost's Strategic Fund in the 2019/20 planning round.