



UNIVERSITY OF
CAMBRIDGE

EDUCATION SPACE AT CAMBRIDGE

2017-2020

better facilities
better access
better experiences

A WORLD-CLASS, EDUCATION-CENTRED ESTATE



High-quality, accessible spaces for teaching and learning are vital to our endeavour as a world-class university. Spaces that are attractive and fit for purpose help us to attract the best students and academics from across the world, and encourage the encounters between people and across disciplines that are necessary for world-class learning and research. The range and diversity of spaces within a small geographical area is one of Cambridge's historic strengths: our social proximity seeds both community and collaboration.

However, we also have to face the fact that we do not use the spaces we have as well as we could. Cambridge has the largest ratio of teaching space

to student numbers in the country, yet some departments report that finding enough rooms for lectures and exams is a problem every year, and many graduate students do not have dedicated work spaces. We also lack both the data and the modelling tools needed to ensure our estate properly supports current educational activities and future needs.

Lots of creative work to improve our education space is already going on, from re-imagining research and teaching infrastructure across a whole site (the BioCentrum project undertaken by the School of Biological Sciences) to detailed research into users' experiences of study environments (the Protolib project at the University Library).

The Programme Board for Education Space, which will report to the General Board, has been created to help facilitate and coordinate these kinds of projects, to encourage the efficient and creative use of the spaces we already have, and to develop the information infrastructure that will help us deliver a world-class, education-centred estate.

Professor Graham Virgo
Pro-Vice-Chancellor for Education

EDUCATION SPACE IN NUMBERS

11.2%

Cambridge's utilisation rate for teaching space in the 2014/15 HESA Estate Management Return, the lowest in the Russell Group

12+ different systems

used to book rooms across the University

3,500+ students

sit an exam on the busiest day of exam season

£23.4M

per year could be saved if we used our estate as efficiently as other Russell Group universities of a similar size

18,500 hours

of undergraduate lectures, seminars and practicals delivered in an average year

£144.5M

was spent on estate development in 2015/16

76%

of students surveyed say the quality of campus facilities is an important factor in choosing where to study

30%

of the University's overall carbon footprint comes from energy consumption in buildings (which costs approximately £16M per annum)

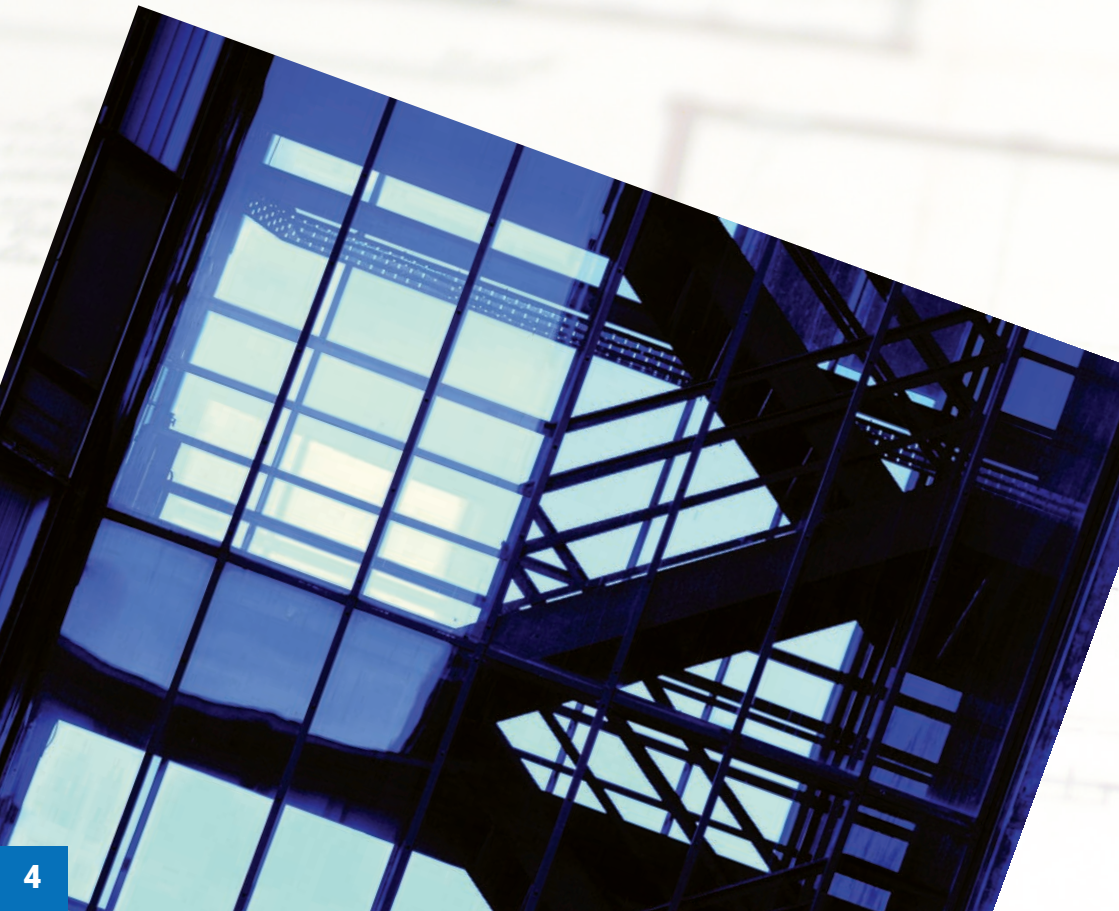
300 graduate study spaces

could be found by reorganising office space on the Sidgwick Site

CHALLENGES AND OPPORTUNITIES

Educational need is at the heart of the University's Strategic Plan for the Development of the Estate. Our buildings and our infrastructure must support and reflect our mission to contribute to society through the pursuit of education, learning and research at the highest international levels.

Understanding the ways we currently use the estate and how our needs will develop is crucial for creating the teaching and learning environments of the future. Constructing and maintaining buildings is a significant expense for the University, so we have to be sure that building plans are carefully matched to educational need. Making the best possible use of the space we have helps to reduce both the cost and disruption of major building projects, and frees up time and money to spend on research and teaching.



The challenge

Cambridge has an unusually large teaching estate, but many departments still do not have access to suitable spaces for all their educational needs.

Most PhD students in non-laboratory subjects do not have access to dedicated work space in their departments, leading to feelings of isolation as well as the logistical challenge of finding somewhere to work every day.

There is an estimated £4.7bn demand for capital investment in the University's development pipeline. In a capital-constrained environment, the University has to prioritise its expenditure and use existing assets efficiently.

Lecture timetabling and room booking is a complex and labour-intensive manual process. Any disruption (e.g. because of refurbishment) causes hundreds of hours of extra work and sometimes expense if internal solutions cannot be found.

Many different room-booking protocols are in use across the University. Booking rooms is often difficult for users and time-consuming for administrators.

Much of the space in the University is hidden within departments and invisible to anyone outside the department.

There are not enough suitable spaces available to those who organise University examinations, leading to the use of costly external venues.

The opportunity

To view more education space in the University as a shared resource, encouraging people to work across institutional and physical boundaries.

To integrate graduate study needs into estate planning to create more graduate work stations, leading to better social and intellectual integration of graduate students in departments.

To improve our understanding of the education space we already have in order to make informed decisions about how to use it as financial pressures increase.

To introduce better room management systems and better scheduling software to make regular timetabling easier and improve our ability to plan for and deal with disruption.

To introduce a University-wide room-booking system designed specifically to make booking easier for everyone and cut down the administrative burden of managing space.

To construct a comprehensive database of education space across the University.

To promote a culture of sharing space that improves access to lecture theatres so that examinations can be held in suitable, University-owned spaces.

NEXT STEPS

In view of both the challenges and opportunities offered by the current state of education space at Cambridge, the General Board views improving the use and management of education space as a strategic priority.

The Programme Board for Education Space was created in 2017 to help facilitate work to improve education space. The board is chaired by Professor Graham Virgo, Pro-Vice-Chancellor for Education.

The Board's priorities are:

Collaboration and dialogue

The board is working with Schools, faculties and departments to support their ongoing work around education space, to harness their expertise and engage with any concerns.

Data-gathering and modelling

It is collecting as much information as possible about educational need and how spaces are currently used, as well as developing better modelling tools to process that data to ensure that its recommendations are based on robust evidence.

Identifying and sharing good practice

It is gathering examples of good practice, successful projects and innovative ideas around education space from across the University and beyond, and sharing them as case studies on its website (see back cover).



CASE STUDY

BioCentrum

A new masterplan for teaching and research infrastructure in the School of Biological Sciences

Why was the project needed?

The infrastructure on the Downing Site is poorly suited to the current needs of the School of Biological Sciences. Teaching spaces are scattered across multiple buildings which do not meet the needs of the current courses. Refurbishment projects on the site have been sporadic and not well planned with respect to the overall needs of the School or the local environment. Several buildings are now in a poor state of repair, lack vital facilities, and are difficult and costly to refurbish to the standards required by modern day bioscience and expected by students and staff.

The BioCentrum provides a new vision for the Downing and Old Addenbrooke's sites that honours their history while transforming them into a vibrant, modern, attractive hub for learning, teaching and research. BioCentrum planning is both driven by, and itself helps to shape, the future teaching and research strategy of the School of Biological Sciences.

How was the project run?

A steering group chaired by the Head of School, Professor Abby Fowden, and responsible to the Council of the School, directed the masterplanning process and conducted extensive consultations with teaching, research, and administrative staff across the School's departments. A Teaching Strategy Group composed of academics and administrators is considering how a new, shared inter-departmental model of teaching space could lead to new possibilities for the School's Tripos teaching. An Academic Forum is doing the same for the School's research strategy.

Who to contact for further information:

Dr John Dalton, Capital Developments Consultant at the School of Biological Sciences.

For more case studies visit:

www.educationspace.cam.ac.uk

What was achieved?

Consultation with stakeholders and data about current patterns of teaching led to proposals for a new teaching hub that will bring most of the School's teaching into a defined, central geographical area. Architects Feilden Clegg Bradley prepared a new masterplan for the Downing and Old Addenbrooke's sites which, as well as the teaching hub, proposes a series of interlinked research buildings, with significant improvements in the number and diversity of social and study spaces available to students and researchers.

There is strong agreement across the School that the BioCentrum project represents a major step forward for both teaching and research in biological sciences, and for the provision of facilities on the Downing and Old Addenbrooke's sites. A consultative and transparent scoping and design process has ensured that the project responds to the needs of students, lecturers, researchers, and School officials. The project is now ready to seek funding.



credit: Feilden Clegg Bradley

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