Technology-Enabled Learning

Introduction from the Senior Pro-Vice-Chancellor (Education)

Working together with Cambridge University Press Online Learning Services, the University is creating a Technology-Enabled Learning Service [TEL] to help Faculties, Departments, other University institutions and Colleges to refresh existing teaching programmes or develop new ones, making best use of new educational technology. This work has potential significantly to improve learning outcomes for our students and their skills development, but also to open up Cambridge education in blended or remote learning formats, including new opportunities in postgraduate, professional and executive education.

A current pilot project has enabled the creation of four new courses with exciting approaches enabled by technological innovation. These are:

- a pre-sessional skills development programme for first-year undergraduates in Natural Sciences;
- a fresh new module enabling students in English to engage with manuscripts;
- an online resource for clinical students engaging with end-of-life scenarios;
- a ‘flipped classroom’ presentation of a key paper in the Engineering Tripos which has created opportunities for students and teachers to use contact time creatively and to introduce new layers of learning in problem solving.

Further work will include new courses in Babylonian and Genomic Medicine.

In the next phase of development, we are looking for ideas across the full educational spectrum – from widening participation to professional or executive, from undergraduate to postdoctoral, from architecture to zoology. If you have ideas for a potential project, the TEL Service team can work with you to understand how courses might be refreshed or developed, to suggest options, and to develop a realistic expectation of the logistics and time commitment involved. A recent round of consultations with Councils of Schools and the University Library have indicated real interest in developing projects across a range of settings.

Once funding for the next phase is confirmed, we will issue a formal call for proposals in the Easter Term, but this pre-call is designed to help academics to plan a submission or to explore potential ideas.

Further detail is included below. Questions about the TEL service or requests for assistance may be directed to the project lead, Michael Cresswell [telprogramme@cambridge.org].

I hope you will welcome this opportunity and I encourage you to put forward your ideas for consideration when the call is released.

Professor Graham Virgo

Senior Pro-Vice-Chancellor (Education)
The Technology-Enabled Learning Service

What is the TEL Service?

The Service has been created in collaboration with Cambridge University Press, to make available dedicated resource to support Faculties, Departments, other University institutions and Colleges to redesign existing teaching programmes or to develop new ones, and to provide technical and pedagogical expertise.

TEL is overseen by a cross-School Development Board, reporting to the General Board’s Education Committee and chaired by the Senior Pro-Vice-Chancellor (Education).

What can the TEL Service do?

The TEL Service provides expertise to help manage conversion or development of existing teaching content into new formats, to improve learning outcomes for students and enable most effective use of academic teaching time, through use of e.g. flipped classrooms, problem-based learning, peer-group activities. These can be supported alongside traditional face-to-face teaching modes such as lectures, supervisions and seminars. The TEL team will design the learning journey, produce teaching materials and media design, and create online spaces for teaching, peer-learning and other components. The TEL team will also oversee the quality of the finished product, and can assist with market information and student engagement.

The TEL Service can also help Departments to identify programmes which are suitable for release as fully-online courses or components of blended courses, where this is appropriate and desirable. Courses on open platforms can be revenue-generating, again where this is appropriate and desirable.

What will institutions/individuals have to do?

The TEL Service takes a partnership approach, working closely with academics within their home institution to understand the learning objectives of their course, to evaluate existing materials and to adapt them where necessary. This can include the creation of new materials and a redeveloped learning journey.

We will need participating institutions to support projects through making available sufficient academic time, and through providing assistance where needed via IT teams and teaching offices. Although the TEL Service provides extensive practical support, academic staff will need to be heavily involved to provide content, review progress and ensure that the developing new programme aligns with its intended learning outcomes. This can involve being available for recordings at specific times; reviewing draft materials over a few days; writing problem sets, quizzes or similar; and co-ordinating contributions from other academics.

The programme is not intended only for those already working with technology-enabled learning. We very much want to hear from institutions or individuals who may be unsure or even sceptical about the benefits of the TEL programme.
If you would like to discuss the programme in more detail, or find out what is involved in running a TEL project, please contact Michael Cresswell.

What sort of projects are we looking for?

TEL can benefit teaching programmes at all levels, from pre-University outreach courses through to executive programmes targeted at mid-career professionals. TEL can also help Cambridge reach students who may wish to start on short, non-credit-bearing courses, and who may then develop to the point where they enrol on core programmes. In this way TEL can have a clear benefit for student recruitment and improving access.

In the forthcoming TEL programme we are hoping to support 8 projects, broadly in line with the parameters below:

- at least one programme targeted at pre-University students
- at least one programme in executive or professional education
- at least one fully-revised Tripos paper
- at least three programmes that can be released on external platforms and will be revenue-generating over time. These might be an external reworking of one of the above programmes.

In addition, the final suite of projects will contain a mix of short and award-bearing courses, across a range of institutions and settings.

Who can apply to participate?

Academic and professional staff are encouraged to apply, whether as individuals or in teams. A project leader must be identified, able to commit to the duration of the project.

What information is needed to make an application?

We will need to understand:

- the teaching and learning needs you are seeking to address with TEL;
- who are the existing or intended students, and how would the introduction of TEL benefit these learners;
- how are you planning to use the resulting TEL content;
- any particular launch date that has to be met;
- details of academic staff who will need to be involved, and their availability.

What will happen next?

We will liaise with project leaders to understand the project, to discuss the proposed work in detail and to explain the commitment that will be needed by Departments.

The call for TEL projects is expected to open formally in May. A shortlisting process will lead to selection of the next set of projects by June 2020.

Those not selected may be placed on a reserve list so that we can increase the number of projects if we have capacity to do so.