

Learning technologies for course design

eLearning Unit, Centre for Lifelong Learning, elearning@liv.ac.uk

The following table outlines a few key questions to support you to think through some of the issues, applications, and opportunities for using digital technologies in course design. Not all questions or all the applications will have relevance in all modules or subjects, and it is not an exhaustive list of technologies that you could use! Please contact the eLearning Unit for more support with using different learning technologies.

1. Can students access basic levels of course information online in VITAL modules?
<ul style="list-style-type: none">• Can students access essential module information in VITAL?<ul style="list-style-type: none">○ Module handbooks.○ Reading lists.○ Past exam papers.○ Staff contact information etc.• Is your module side-menu bar menu well organised so student can easily access information rather than going through multiple layers of folders?• Is there a degree of consistency across VITAL modules within a programme so students can easily access similar information and resources? (VITAL Baseline requirements – this VITAL module will explain in detail about this objective.)
2. What opportunities are there to use technology to support student learning away from the classroom?
<ul style="list-style-type: none">• Can students access in VITAL information that enables them to utilise their independent or informal learning away from the classroom?• Can they access study and learning skill resources such iLearn?• Can they access information that outlines your expectations for how they use their independent learning time, workload requirements, how to prepare for classroom sessions etc?• Can information be added to VITAL that enables students to learn effectively from online resources e.g. key questions for consideration, how to engage with specific academic resources etc?• Could more information delivery be put online (short screencast e-lectures etc.) – would this enable you to use your ‘face to face’ time with your students more productively? (e.g. by using classroom time for application or problem solving sessions, working with difficult concepts, more practical work etc.)

3. How could technology support student inclusion and diversity?

- Can students with different prior knowledge access learning resources to support their specific needs?
- Can students access learning resources at different levels – introductory, more advanced, specific sub-topics etc. so they can learn at their own pace?
- Are resources (where appropriate) in a range and variety of formats (text, audio, images, video) to support students different learning preferences?
- Are key learning resources in appropriate electronic formats to support students with specific educational requirements? (e.g. dyslexia).
- Can students that have missed, for genuine reasons, part of a module catch up using online resources?
- Are existing case studies and resources available online that could support the internationalisation of your learning resources to make them more relevant to international students?

4. How could you use technology to improve communication with students?

- What opportunities are there to support online communications with students?
For example:
 - Using a [VITAL discussion board](#) to support student questions and queries in a large cohort, rather than students emailing staff individually.
 - Alternatively, common questions from student emails to tutors could be grouped together and then fed back using the blog tool in VITAL – the blog tool can be used as a ‘live’ element to a module.
 - Using non-institutional software such as Twitter feeds, Facebook groups etc can be set up to support whole group communications.
 - Online tutorials or revision sessions using [Adobe Connect](#) webinar software.

5. How could you use technology to support formative and diagnostic assessment?

- Could you use a technology supported assessments at the beginning of a module to assess students’ level of prior knowledge, preconceptions on key topics etc? For example:
 - Diagnostic quiz using VITAL’s test tool.
 - MCQ or poll question in the first lecture of module using clickers or mobile phones using software such as [TextWall](#) or [Polleveywhere](#).
- How could technology be utilised to give students opportunities to self-assess and self-regulate their learning periodically? For example:
 - [Online quizzes](#) using VITAL’s test tool.
 - Development of online learning resources with built in self-assessment questions using [Xerte](#).
 - Set conceptually difficult questions, questions that test student’s level of knowledge on key topics, or drawing out preconceptions on discursive topics using clickers, or mobile phones using software such as [TextWall](#) or [Polleveywhere](#).
 - Student generated MCQ’s using [PeerWise](#). Students will need to reflect

- on their learning to develop effective questions.
 - [Simulation software](#) – where can students safely make and learn from mistakes?
 - [Peer reviewing](#) in class, short coursework assignments submitted by students online into VITAL. The tutor can quickly give group feedback, and post online the best submission for students to self-assess against.
- How could you use data from technology supported formative assessments to monitor student progress and adapt subsequent teaching to meet the needs of a student cohort? For example:
 - By reviewing student responses from methods outlined in the previous bullet point.
- How could you utilise different technologies to send formative feedback to students? For example:
 - Formative comments on a [wiki](#) supported group project,
 - Formative comments on an individual reflective journal,
 - Comments on draft coursework using [GradeMark](#) tools in Turnitin or Blackboard's [inline grading](#) tools.

6. How could technology be used to support summative assessment?

- How could you utilise different technologies to improve the efficiency and effectiveness of the summative assessment process? For example:
 - Using VITAL's Retention centre to monitor students that are not accessing online learning resources, late submitting coursework assignments etc.
 - Wikis to support assessed group work. Students can access a shared online space away from face to face meetings etc. Staff can monitor a groups online activity and progress.
 - Turnitin's [PeerMark](#) and Blackboard's Self and Peer assessment to support peer process assessment.
 - Peer evaluation of group work using [WebPA](#) To ensure individual students' contributions to a group mark are assessed fairly.
 - Summative online MCQ tests using VITAL under exam conditions. Enables images, multimedia etc to be used as part of the test, scores are marked automatically.
 - Eportfolios – evidence from placements using [PebblePad](#) can be verified by external tutors or employers whilst students are on placement etc.
 - Online coursework submission using VITAL's assignment tool or Turnitin. Some efficiencies in the distribution of coursework for marking, checking for non-submissions.
 - E-marking and e-feedback – some assignments can be more efficient to grade electronically by the use of standard feedback comments, assessment rubrics, marked papers are automatically distributed back to students.
- Support students to develop and evidence specific digital skills and digital literacies through completing assessments using different digital technologies.
 - Assessment diversity – students produce video or other multimedia resources as part of an assessment.

7. Could you enhance learning with online and multimedia content?

- What existing openly accessible digital resources are there available in your subject area that you could utilise? (E.g. existing open educational resources such as [Khan Academy](#), important web databases, multimedia resources available from the library etc.)
- How do your students use openly accessible learning resources to supplement and augment their learning?
- How could you support students to make effective use of openly accessible resources?
- Are there opportunities for students to engage individually or in groups to actively create electronic learning resources? (e.g. development of multimedia learning resources as an output from an enquiry-based learning activity, glossary development etc.)
- Are there opportunities to develop or utilise existing learning technologies to support specific aspects of your teaching? (e.g. simulations, multimedia resources to support practical work etc.)

8. Are there opportunities to develop student skills using technology?

- What learning, professional and employability skills can students develop from using specific learning technologies and online learning activities?

9. How could you use technology to access non-campus based students?

- Would online distance learning enable more or different types of students to access your subject area?
- Would your programme suit being developed into a wholly online Laureate programme?
- How could you use online learning technologies to provide lower cost/ flexible learning in the future?
- What role could MOOC's (massive open online courses) have in your subject area?
- Are there opportunities to collaborate with other institutions to create blended forms of online learning that share expertise across the different institutions? For example, by developing a [DOCC](#) (distributed open collaborative course)?