Informatics Learn Template

Note: The template changed completely with the move to Learn Ultra for A/Y 2023-24 and the migration of Informatics courses to OpenCourse.

What is a Learn template?

Templates can be assigned to Learn course pages. They can currently only be applied at *School* level and include the content, design and settings defined in the template (e.g. course menu, colour, banners, rubrics etc).

Why develop a Learn template for Informatics?

When I took up post as Learning Technologist for Informatics in February 2018, students across Informatics had access to Learn via courses shared with Mathematics (and other subject areas). Learn adoption across Informatics however was minimal. Of the 105 courses listed on the course index page, 70 had a course instance on Learn. However, of these 70 course instances, only eight were the primary site for course content (and of these, four had online learners). The other 62 course instances on Learn were primarily used as a function for students to access recordings of lectures.

There were a few instances of course organisers making use of some other Learn tools (the Leganto Resource List and the Announcements tool) and several used some form of assessment tool in Learn (Turnitin or the Learn quiz tool). However, nearly all simply linked out to information hosted elsewhere (most here: http://www.inf.ed.ac.uk/teaching/courses/, some here: https://blog.inf.ed.ac.uk, some here: https://ease.groups.inf.ed.ac.uk and a couple here: http://wp.inf.ed.ac.uk). This obviously provides a disjointed experience for our students.

Efforts to improve the Learn experience were therefore not

only justified but essential. Such efforts were primarily targeted towards the following outcomes:

1. Improve the *student* experience of Learn via a more consistent design
2. Improve the *staff* experience of Learn by offering a more customized, flexible and responsive service to meet the needs of academic and support colleagues.

It is worth mentioning that improving the student experience of Learn via a more consistent design is part of a wider University project called Learn Foundations. The Project page for Learn Foundations can be found here.

Learn template: iteration #1 (Semester 1 2018/19)

Course menu

Course information

Replaces the previous 'landing pages' and provides a quick, at-a-glance summary of course information. Primarily driven by scripts embedding content from Theon.

Announcements

A useful tool for sharing important course information with students, without having to use mailing lists.

Course content

This is where the bulk of the teaching content sits. A table format is frequently favoured, with links to lecture slides, lecture recordings, key readings and tutorial / lab sheets.

Replay lectures

Tool link to Media Hopper Replay, the default service for automated and ad hoc lecture recording.

Resource Lists

Includes a tool link to the centrally supported Resource List service (Leganto). Many courses are still not taking advantage of this service, and instead simply listing recommended books. Advantages of the Resource List service include: key resources become more accessible to students; students can quickly see which items are ‘Essential’ reading; improved discovery of resources.

Discussions (Piazza)

Many courses use Piazza for class discussions. Unfortunately, we can’t take advantage of the LTI link due to concerns around the security of the data.

Coursework and feedback

Includes a link (hidden to students) to a webmark form where course organisers are instructed to enter key coursework details. On submission of the form, this information is then automatically embedded on the same page. This provides a consistent experience for students when wanting to access key coursework information. The data driving this can then be used to produce customized timelines for each student, to facilitate better workload planning.

Assessment and Exams

Quick and consistently presented information relating to common assessment queries such as late submission policy, academic misconduct, marking criteria and exam information (where relevant).

Student Course Feedback

Consistently presented information on the different ways students can give feedback about their course. Also contains instructions for staff on how they can encourage and collate course feedback (hidden from students).

Help

Information (relevant to course) on how and where to seek help, eg InfPALS, Programming club etc.

Help for Staff

Hidden from students, includes links to avenues of help such as the Informatics Learning Technology Support site.

Groups

Tool link to the Groups function in Learn. This year the ITO, along with course organisers, are managing tutorial groups (and, in some cases, lab groups) via Learn. This tool link allows students to sign-up for specific groups (where appropriate) and allows them to see in which groups they are enrolled, along with access to group specific tools such as discussion boards, group email, blogs etc.

Course Management

Guest Access

All Learn courses in Informatics are enabled for Guest Access. This means anyone in the world can access the 'home page' of the Learn course (default=Course information page). Course organisers can then choose which content areas they want open to the world, vs restricted to students enrolled on the course. If course organisers want courses restricted to anyone with an EASE password, they can enable the course for self-enrol. If they would like their course promoted on the self-enrol panel in Learn, they should email the Informatics Learning Technology service: lt-support@inf.ed.ac.uk.

Grade Centre

The Grade Centre in the Informatics template contains one

marking schema – which maps to Common Marking Scheme 1: Undergraduate Degree Assessment (except BVM&S and MBChB) and CMS 4: Postgraduate Assessment Mark.

Useful links:

Learn Foundations Projects – background information

Learn Foundations Project page

Overleaf Cloud Service Project

The School of Engineering in the College of Science and Engineering is undertaking a project to examine the appetite for a LaTeX authoring tool to support staff and students in creating, collaborating and sharing LaTeX documents.

The project has funded a site license for the Overleaf cloud service, which is **open to all staff and students** and allows access to a pro account, for the duration of the project which concludes at the end of January 2019.

Related links

http://www.projects.ed.ac.uk/project/sce013/brief/overview

https://www.ed.ac.uk/information-services/computing/desktop-personal/software/main-software-deals/other-software/overleaf

Learning analytics for improving evidence-based teaching

I recently attended a workshop facilitated by SICSA entitled Learning analytics for improving evidence-based teaching. There were around 20 delegates in all, representing several universities across Scotland. Pavlos Andreadis was also representing the University of Edinburgh. Discussion sessions were led by Kassim Terzic.

The invited guest speaker was Andrew Cormack, Chief Regulatory Adviser at Jisc Technologies, who gave an informative talk on *Learning Improvement, Ethics and Law*. You can read more about Andrew's thoughts on GDPR and education on his blog.

For most of the day, we formed smaller groups to discuss various aspects of learning analytics data points at our respective institutions. Summaries of our discussions can be found below.

What learning-related data is currently gathered and stored in your institution?

– Grades (exam, coursework)

– Entry Requirements

– NSS evaluation (likert scale + free text)

– Engagement

– Attendance (eg Glasgow Caledonian require swipe access to lecture rooms)

– Lecture capture

– Forums

– Reading lists (different access methods)

St Andrews also conducts exit type interviews with its students, measuring longer term feedback. Pavlos also noted that feedback is also given in the form of complaints, either to the student union or director of studies (or both). This kind of feedback is less likely to be logged in a central system.

How is impact of changes on learning currently measured in your institution?

– Scatter plots (modules vs all)

– Average / standard deviation (final grade / exam only / per exam question)

– Student evaluation (module boards)

– Trends per student

– Averages / histograms over years

– Student background (how do students with a programming background compare with those who don’t re final classification)

– Selection of exam question.

How can statistical and data-focussed approaches help evidence learning outcomes?

Consistent data points across all courses and all institutions:

– Learning outcomes

– Delivery method

– Assessment method

A proper experiment in this area would require an active intervention and a control group. This, however, would be ethically difficult. It was suggested we look instead at 'passive' interventions. For example, could we use text analysis of discussion boards to demonstrate understanding of key concepts in the lecture? Or look backwards for evidence of a student request for change and if the resulting change had the desired effect?

We also discussed how machine learning could be useful in predicting students who are 'at risk'. A word of caution here though: the University of Edinburgh has a Learning Analytics Policy and has developed seven principles to sit alongside this policy. One of these principles states:

> "Our vision is that learning analytics can benefit all students in reaching their full academic potential. While we recognise that some of the insights from learning analytics may be directed more at some students than others, we do not propose a deficit model targeted only at supporting students at risk of failure."

What data-driven approaches could be applied in a study across Scottish Universities?

We then discussed how we could evaluate a passive intervention across multiple HE institutions. One suggestion was to find a course common to all Computer Science programmes (eg a second year Database course) which has remained relatively consistent

across 7-10 years, to use in the data study. We could introduce a guest lecture to this course, which could be delivered remotely. We could then measure:

– Engagement

– Satisfaction

– Learning (grades)

and compare these data points to previous cohorts.

A personal note

Without a clear understanding of what 'gap' this guest lecture was aiming to fill, I remain unsure as to what such an experiment would tell us. I preferred (my own) suggestion of introducing more (and different) types of assessment into a stable, common course across programmes. *How* we assess, *how often* we assess, *why* we assess and the *feedback loop* is ripe material for a lot of research into education just now, and it is my personal opinion that we could contribute to this research in a meaningful way.

Finally, a cautionary tale: on 29 May I attended a talk given by Joel Smith from Carnegie Mellon University entitled: The Eye of the Needle: New Understandings of the Complex Barriers to Instructional Innovation with Technology. In this talk, Professor Smith talked about the twin challenges of any TEL project:

– effectiveness in improving learning outcomes

– effectiveness in terms of adoption and sustainability (ie the implementation of innovations).

Demonstrating the former does not necessarily lead to the latter. We should always keep this in mind when looking to

evidence better teaching.

Mobile Capture Kit now available

I’m pleased to say Informatics now has a ‘mobile capture kit’ which can be booked out by colleagues. Perhaps you want to record a lecture in a space which currently doesn’t have the hardware installed? Or a research seminar? Or a video answering a common question posed by your students?

You may already have some equipment which can support you in this. However, the Learning Technology service has packaged this up together for ease of use to support you in your teaching. It consists of the following:

– Windows laptop (HP Elitebook G3)

– USB Document Camera (HoverCam Solo 8Plus)

– Webcam (Logitech C920)

– USB mic (Snowball)

– Graphics tablet and pen (Wacom intuos)

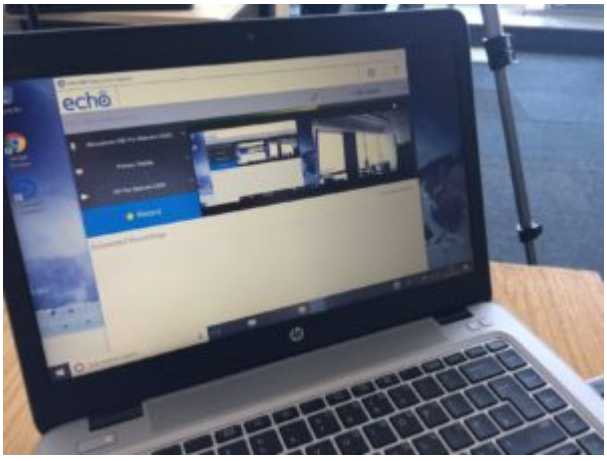
– Tripod.

The laptop has the Echo360 Classroom Capture client installed which supports recording your screen, audio (via the Snowball mic) + video (via the Logitech webcam or HoverCam document

camera).

It is worth noting that the mobile capture kit could also act as a mobile solution for video conferencing. Conferencing could be managed by a web browser (such as Blackboard Collaborate) or via an application such as Skype for Business.

If you'd like to borrow the kit, please get in touch with the learning technology service.



HP Elitebook G3


Logitech C920 webcam on tripod

Snowball USB microphone

Wacom tablet and pen

HoverCam Solo 8Plus + green screen

(Academic) Blogging Service

The Learning, Teaching and Web directorate within Information Services is starting a project that aims to deliver an Academic Blogging Service for the University. The service will support research and teaching and provide students and staff with a user-friendly blogging environment for sharing knowledge, reflecting on learning, and representing individual and group identity online.

They are currently in the user consultation phase. If you missed the workshops, you can still contribute your thoughts and ideas via the wiki.

Links are:

https://www.wiki.ed.ac.uk/display/ABS/Academic+Blogging+Service

https://www.wiki.ed.ac.uk/display/ABS/User+Consultation

For what it's worth, my main suggestion was to remove the word 'academic' from the service.

Project Management – a case study

Background

Edinburgh College of Art (ECA) frequently assesses to multiple learning outcomes (LOs). This means that for each assignment, a student will receive multiple grades and sections of feedback. In the past, ECA used a custom VLE (the Portal) to

support this kind of assessment. Tutors would select grades for each learning outcome which was being assessed (often three) and feedback for each learning outcome. Students would then need to leave a piece of self-evaluation and 'submit' in order to access their tutor's feedback. As we migrated from this legacy VLE (the Portal) to the centrally supported VLE (Blackboard Learn) I went about trying to identify how best we could leverage the tools of the new system for a workflow which was familiar, and favoured, by teaching staff and students at ECA.

The challenge was as follows:

– Allow markers to leave multiple grades and feedback for each assignment

– Allow support staff to download these grades for upload to the central assessment and progression software with minimum intervention (and risk of mistakes)

– Allow students to receive their multiple grades and feedback with as few clicks as possible, and represented in a clear and consistent way.

I identified the rubric tool within Blackboard as the most useful tool we could use to replicate this workflow. While this addressed point 1, it did not address points 2 and 3:

– as it stood, administrators could only download the aggregated grade from the Blackboard Learn Grade Centre.

– students would have several clicks (many of which would not be intuitive) in order to access their feedback. Because of the complexity of this task, and the multitude of ways a student could give up half way through, communicating grades and feedback (essential to the learning process) would be severely compromised.

I proposed that ECA use some if its Information Services (IS)

Apps development budget for investigating ways of addressing these issues. I met with a project manager from IS and we blocked out the best part of a day for exploring what the current challenges were, what the risks were for continuing with the current system, and the opportunities for developing something which could improve the experience.

I then took these initial findings to the development team in IS at a subsequent meeting. After ruling out some options, we proposed building a new building block for Blackboard which would provide a different view into the Grade Centre. This would have to be accessed via a new tool, rather than a different stylesheet for the existing tool (My Grades). This would introduce a potential cause for confusion, but I balanced this against the potential confusion from the existing workflow and argued the benefits would outweigh the challenges.

The project then moved into the development phase. I was tasked with testing the Beta tool. The new tool went live for ECA staff and students in September 2016. After a year of successful deployment, the tool was made available to the rest of the University in September 2017.

Project documentation.

Hello colleagues!

My name is Alex Burford and I'm the new learning technologist for the School. If you're not sure what that means, my job is "to support the development and delivery of high quality and innovative teaching materials and methods for both on-site and distance-learning students".

I hope to develop this site into a useful support tool for colleagues as and when you have a questions about learning technology. Initially, the site will focus on centrally supported tools but as I get to know the School better, this may well widen out into more bespoke tools. Similarly, if you'd like this site to cover a particular product or service, please don't hesitate to get in touch.

I shall also be offering regular informal drop-in sessions and some more targeted training events. Please keep an eye on the Training page for further information on this. Meantime, if you think I may be able to help you in your teaching, please don't hesitate to get in touch.