

Teaching Excellence Case Study

Flipped learning: Using videos and badging to maximise class time Practitioner: Andrew Tickle. School of Computing, Electronics and Mathematics, Faculty of Engineering, Environment and Computing aa1325@coventry.ac.uk Course: Various

Student Level: Levels 4-7

LINKS TO EDUCATION STRATEGY PILLARS

- Creativity and enterprise
- Intercultural and international engagement
- Digital fluency

AIMS

The course team wanted to free up more of the students' limited contact hours for simulations and practical exercises. A **flipped learning approach** was introduced so that students could cover the more theoretical aspects of the course outside of the class time, and then bring that knowledge to campus ready to put it into practice.

ACTIONS

A series of videos were recorded covering key conceptual points within the course. Initially videos were produced for Masters level students (up to 60 minutes); the approach was later extended to undergraduate courses (videos of up to 20 minutes).

Students are asked to watch the videos in advance of a lecture or seminar, and to **post "hot questions"** in response to the material covered. Students can also "like" the questions posed by their peers. These questions are then addressed at the face-to-face session, along with activities to test students' understanding of the video content (e.g. quizzes with Socrative). Thus, there are clear links between the flipped content and the in-class activity.

To incentivise student engagement with the videos, **digital badges** were set up using Moodle. Students can gain these by taking quizzes online to test their knowledge of the content. Videos are released week by week so as not to overwhelm students with too much content at once.

IMPACT

As intended, the flipped approach has enabled more class time to be used for practical activities. It has also enabled students to engage with key course content **more flexibly**, at times and in spaces of their choice.

As well as being successfully rolled out across courses at various student levels, the videos have been extended to **live stream** versions with international cohorts (such as <u>KPIT_students</u>).

Students have also been able to emulate the video approach themselves— for example, by creating effective recordings for use in their **work placements.**

STUDENT FEEDBACK

- "Dr Tickle's videos are extremely helpful and make learning very interactive. They make the module flow a lot better."
- "Very **passionate and engaged** lecturer makes the lectures very easy to stay focused in."
- "CU Moodle lectures which are uploaded as YouTube videos so we can watch anywhere anytime really easily. Answering to each student hot questions to **reinforce our learning."**
- "The documentation available on Moodle is quite exhaustive. The lecturer is passionate about the subject they are teaching the information given is both in depth

and easily understood."





TOP TIPS

- Introduce flipped learning early on in the course, so that students get used to the approach and view it as an integral part of their learning.
- If students are not forthcoming with "hot questions", staff can usefully post questions themselves, highlighting commonly asked queries about the topics in the videos.
- Analytics data can help staff to gauge students' level of engagement with the video content, and can act as the basis for reminders if necessary.
- Learning Technologists within your faculty can provide support with recording videos, equipment, and digital badging in Moodle.
- The University subscribes to **Screen-cast-o-matic**, which allows you to capture what's on-screen and provide a voiceover. Again, Learning Technologists can assist with this.

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