Technology Enhanced Learning – Case Study Faculty of Engineering and Design



Peer assessment – in class group design activity **Architecture & Civil Engineering**

Background context

Professor Tim Ibell shares his experience of introducing a peer assessment activity for a first year, Semester 2 Structural Engineering unit. There are around 115 students. They work to develop a design in groups of 4-5. As a group, they present their designs to their fellow students. The presentations take place in two parallel sessions where students ask questions, complete a peer assessment activity and provide feedback to their peers.

Purpose

Instead of academic staff asking questions of each group, students question each other and engage in peer learning. Tim explains: 'When students know what questions to ask, they are educated. It is crucial for students to practise asking questions, to tease out the important aspects of design'. Students know what problems they've encountered and want to know how others solved them. In the workplace, students will need to understand how to receive feedback and criticism from peers. This exercise helps prepare them, for future assessments and for employment. It also helps students from different international backgrounds understand assessment criteria and marking ranges in UK higher education.



This activity does not save staff time in class. A small amount of extra time is needed to moderate peer feedback and collate marks. The activity facilitates greater student engagement and motivation.

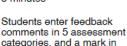
Approach

In this activity, students are assessing a presentation in live time, rather than a written item of coursework. To help implement this approach, the Faculty Learning Technologists developed a Moodle database where students can enter feedback and marks. Student feedback comments remain anonymous. Once checked by staff they are returned with the moderated group mark.

Students present design 5 minutes



Students question & answer 5 minutes







Tutor moderates feedback comments and marks in the Moodle database



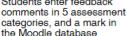
Tutor calculates average marks and enters group marks

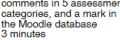




Tutor reveals feedback comments and group marks to













Technology Enhanced Learning – Case Study Faculty of Engineering and Design



Outcomes

Pros

- ☑ Students take responsibility for asking questions and making assessment judgements
- ☑ Students are highly motivated and try harder to perform well in front of their peers
- Students engage positively with the exercise to give constructive feedback. The marks awarded by students are within the expected average range
- ☐ The peer assessment activity is well received by students. There has been no negative feedback about the exercise
- ☑ Students attend class with their own mobile devices which they can use to enter feedback

Cons

- Some students find it difficult to navigate around Moodle and need guidance to find the peer assessment database
- In this activity, students were not obliged to ask questions of their peers. Student questions typically came from around one third of the cohort. Some students chose not to ask questions of other groups
- Peer assessment would be more difficult to manage for group work with individual marks

Recommendations

Tim suggests a number of tips for approaching peer assessment

- 1. Clearly outline the rationale for peer assessment to students. Explain why you have chosen this type of assessment, and emphasise expectations of professionalism
- 2. Make sure students know they need to bring their own mobile devices. Let them know they can contact you in advance for back-up provision to ensure inclusivity
- 3. Check with Computing services and on the Moodle Service Blog in case of any scheduled network or Moodle maintenance
- 4. Talk to the Faculty Learning Technologists to discuss the most suitable tools to support your peer assessment activity. They can provide guidance and support materials

Further reading: Wride, M., 2016. <u>Assessment: Guide to Peer Assessment</u>, *Academic Practice and eLearning (CAPSL)*, Trinity College Dublin

Flowchart image: Created in Piktochart