Built Environment

Learning & Teaching Showcase 2018

BLDG2011 - Building Services

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Flipped Classroom and Blended Learning and Teaching: Digital Uplift/ILI
BLDG2011 - Building Services Course
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Weekly Activities
1. Pre-class activities (Online Quizzes)
2. In-class F2F Lectures
3. Active Learning Space (Interactive tutorials)
4. Post-class activities (Peer group assessment)

Week, 5, 8, 11
5. In-class Online Quizzes
6. Industry Guest Lectures

Week 13
7. Interactive and Adaptive Practice Exam
8. Case-based Group Assignment

UNSW Exam Period
9. Final Exam
A welcome video has been recorded to introduce the course to students.

Students stick a photo and a short note to the Padlet before the course commencement as an ice-breaking activity.
Pre-class online quizzes to *engage* students actively and to use class time effectively can improve teacher-student relationships, facilitate *deep learning* through active learning activities in the classroom, assist students in understanding their own learning preferences, and *promote* student *engagement*.

200+ photos from different building services were taken from three buildings across the campus particularly from the restricted areas.
Course digitalisation by using 360 videos and short videos inspire students and enhance their learning by moving from surface passive engagement to active deep learning.

(Scientia Educational Framework)
A few interactive and adaptive tutorials using Smart Sparrow – for personalised learning and guide students through difficult concepts.

90% of respondents confirmed that the use of interactive and adaptive tutorials by Smart Sparrow at UNSW Active Learning Spaces have improved their learning in BLDG2011 Building Services.
Active Learning Spaces enable teachers to provide an environment for learner-centred and blended approaches supported by current educational technologies.

Use of Active Learning Spaces has increased the attendance and engagement in tutorials. I received 100% satisfaction with all strongly agreeing to the quality of my teaching (CATEI 6 out of 6, S2 2016).
Each student receives a group submission randomly and they have to provide feedback by using the **Workshop Tool** in the **Moodle** to assess their peers.

Students are given an **online rubric** to complete the **assessment** right before the following week lecture.

**Peer-assessment workshop tool** – to encourage students to **reflect** on their role and contribution to the process of the group work and to allow students to see and reflect on their peers' assessment of their contribution.
Findings of the digital uplift project for BLDG2011 has been submitted to the Journal of Professional Issues in Engineering Education and Practice