

# Impact of Learning Space on Engineering Student Engagement with Management Modules

It is generally understood that teaching spaces can have a significant impact of the learner's attainment and engagement [1]. Although this topic is relatively under researched [2] in particular in STEM areas, this area has gained growing interest [3-5] as universities are adapting to the twin disruptive effects of virtual learning technologies [6] and increased expectations of learners [7].

The Faculty of Computer Engineering and Science at University of South Wales has started in 2017 a teaching and learning initiative called Learning Experience Enhancement Project (LEEP) aimed at improving staff engagement with teaching and learning and as corollary, improving students' experience. In this paper, we report data from one of the LEEP project which looked at the impact of teaching space on student experience and engagement.

Teaching on a final year project management module, taught to Electrical and Electronic Engineering students, was moved from an amphitheatre tiered large room to a flat room with sitting arrangement changed to allow 4-6 student to work together and facilitate group activities and engagement.

The design of seating arrangement was such that learners can move from table to table if needed. The table were small enough to allow close discussions but wide enough to enable relevant material and sheets to be shared. The aim was to facilitate collaborative and discussion based learning [8, 9]. Attendance was monitored and students were surveyed on their self-reported enjoyment and learning on the module. 86% of students reported that the change of room helped them **enjoy** the lecture more whereas 72% of students reported that the change of room helped them **learn** more on the module. Additionally, attendance on the module increased by 15% towards the end of the delivery.

This pilot work suggests that engagement of engineering students with management modules could be improved with collaborative and discussion enabling learning environments.

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