



Transforming learning through Scholarship Session Abstract

“Tilt-ing up” student engagement: Assisting UG students with exam revision through coursework

Shiva Sivasubramaniam, School of Science and Technology

This session highlighted the importance of student-centred coursework to enhance their exam revision/performance addressing the learning outcomes. It discussed a novel intervention, its operational difficulties and share the experiences of the academics and students who took part. It also shared evidence on how this has enhanced student learning/performance.

Modularisation of higher education demands different strategies of assessments to address as many learning outcomes as possible. Due to this varied assessment strategies, the coursework do not normally aligned with examinations. Moreover, due to high academic expectations, science students, especially undergraduates are doing superficial revision techniques using question spotting. As the results of this undergraduates are progressing without the ability to reflect and/or apply the knowledge in real-life working environment. In fact these types of “learning-to-pass” revision will not help in their career development. Therefore as a part of the TILT sabbatical, this study investigated whether it is possible for use coursework as form of exam revision. It was hypothesised that exam revision can be enhanced by an interactive peer-assisted learning with academic assistance.

To address this, a second year (NFQ level 5) pharmacology module (BIOL22111) with the history of low average exam performance was selected. The module has two coursework elements, one of which is oral presentation. In this individual students are expected to present a critical analysis of a topic. This assessment was changed into peer-assisted SCALE-UP activity where students worked as a group of four. Each group worked on one common topic with four sub-headings. They are expected to produce 20 slides (5 slides from each student on his/her sub-heading). The topics for each group are carefully selected to map with the exam questions. However this was not revealed to the students. The exercise was split in two 3-hour sessions; in the first session they researched the topic by discussing amongst them with academic feedback. In the final session the group produced presentation slides and submitted. The assessment criteria expects them to produce cohesive slides to address the topic without any repetition but with information on each sub-heading. The performance of this exercise and the exam performance were compared with that of previous years respectively to analyse the effects/impacts of this intervention.

According to obtained data, there were no significant changes in the overall performances in this particular coursework in comparison with previous year. However there was a statistically significant increase in the exam performance from a mean of 37% (\pm STD 17.7) to 58% (\pm STD 10.1). Moreover, the number of students who obtained marks in the higher category (of 2.1 and 1st) has increased while the number of failures has reduced. Overall there was a shift of Gaussian (bell shape) distribution of marks from a peak in 2.2 criteria in previous years to 2.1 level in current year. This suggests that a carefully designed coursework may enhance the revision techniques amongst the students. The session discussed this intervention, its operational difficulties and shared the experiences of the academics and students.

Sivsubramaniam is a principal lecturer/Subject leader for Pharmacology. In addition to his subject specific research, he is active in pedagogic research including internationalisation, student engagement, plagiarism prevention etc. He is currently on TILT sabbatical carrying out interventions studies to enhance student engagement. This presentation is based on his pilot studies.