BIMHSE Lunchtime Seminar Series



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Using VR-Enriched Tasks (VRETs) to Promote Active Learning in Pre-Clinical Gross Anatomy Education

Date: June 23, 2020 (Tuesday) Time: 1:00 pm – 2:00 pm Link to Zoom: <u>https://hku.zoom.us/meeting/register/tJIsd-itqz8pE9HYIg5m2FmaC1wSABF0sUCd</u> Meeting ID: 961 0155 4395 (Simple registration at Zoom will be required)

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Abstract

With the blooming growth of technological innovations, virtual reality (VR) is slowly being incorporated into anatomy education and has provided a brand-new area of research interest for anatomy educators. It is paramount to make anatomy classes more active and student-centred as that creates deeper understanding of the subject matter. The use of VR is not merely to create another atlas for students to browse in their free time. Rather, VR should be used to enhance active learning. For that, task-based learning is believed to be an ideal approach to create an active and engaging learning environment. We aim to introduce VR into large classes of over 250 students and integrate it seamlessly into dissection classes. This pilot study looked at our students' perception and satisfaction of a learning activity assisted with VR.

Prior to the pilot session, three VR-enriched tasks (VRETs) were written by two anatomy teachers. All tasks required participants to work in groups of minimum two people, one using the VR device while the other gave instructions. Two other anatomy teachers, who did not participate in task writing, were invited to review and perform the tasks to verify the task were of adequate difficulty and written with clear instructions. During the VRETs sessions, the participants were given an introductory demonstration and a warm-up task before proceeding to the three VRETs. Each session lasted on average 60 minutes and participants were asked to fill out a 7-point Likert scale questionnaire (7=strongly agree and 1=strongly disagree) at the end of the session.

Two VRETs sessions were held with a total number of 48 participants. Anatomy teachers and technicians were present to assist the participants. The study showed that VRETs were well-received by participants. However, extra training time should be given to users as many commented on the operational difficulty to novice users. Further study would be conducted to look at the impact of VRETs in learning and whether it is useful in creating an active learning environment. We would also look at how VRETs can be run in conjunction to dissection classes.



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