

Digital Learning Environment for Generation Z Students in Veterinary Problem-Based Learning

Project Number: 6000819

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Grant Type: TDG

Abstract:

Problem-based learning (PBL) is widely used in medical education due to its pedagogical benefits such as stimulating critical, reflective and creative thinking and developing interpersonal skills. We have been conducting PBL tutorials in the CityU BVM programme both in conventional ("paper and pen" based) and digital ("screen and software" based) environments before and during the pandemic, respectively. While student feedback showed that our students liked using digital tools in virtual tutorials, such as taking notes in shared cloud-based documents, we lack evidence on whether digital tools integrated into face-to-face PBL tutorials can enhance students' learning processes and learning results. We hypothesise that the learning needs of Gen Z students who are used to digital learning tools can benefit from using a digitally enhanced learning environment in the PBL tutorials too, and we aim to evaluate the learning process, results, and satisfaction in a comparative manner between conventional vs. digitally enhanced PBL environments. We will enrol our 24 3rd year BVM students into two groups of conventional PBL and two groups of digitally enhanced PBL. After six PBL cases, halfway through the semester, the groups will cross-over to the other 'treatment'. The trained PBL tutors will conduct participation grading and the students will fill in self-assessment surveys at the end of each PBL case. Weekly MCQ quizzes will test the content knowledge of the students to evaluate learning results. Finally, at the end of both treatments, a student survey will be used to evaluate satisfaction. Based on these findings, we will evaluate the benefits of a digitally enhanced PBL learning environment in a post-pandemic face-to-face teaching setup. Our research will help plan future PBL courses and offer guidance for the broader veterinary and medical education community.