

The best of the old and the best of the new: the postgraduate experience of problem-based learning during COVID-19

Authors: Josephina Price,^A Karima Zitouni,^A Ibrahim Basar,^A Sophie Ridge,^A Megan Wright,^A Tessa Rosendahl,^A Ioannis Nikolaou,^A Henry Stone,^A Sofia Ehsani^A and David Gillott^A

Introduction

COVID-19 initiated a major change in educational settings. The conditions of the pandemic forced the majority of higher education delivery online, so teaching-learning was conducted at home for the first time for many medical students. Problem-based learning (PBL) is a quintessential aspect of the St George's Graduate Entry Medicine course, with the university being one of the few UK-based medical schools to employ small-group learning as part of teaching. Tutorials provide a safe space to learn in response to 'real-world' situations and allow students to develop capacity for self-direction to drive their own learning alongside peer-review.¹ From the pandemic onset, COVID-19 forced PBL wholly online and the small-group format was conducted virtually for the first time. The project is the first of its kind to examine student experiences of online versus in-person PBL teaching and test with the students affected if core learning principles behind group learning remained intact at St George's.

Methodology

A combination of quantitative and qualitative analysis was used to delve into shifts in student perspectives. Data collected from feedback-forms completed by those who experienced online PBL tutorials via MS Teams in 2020–21 (n = 47), were compared to equivalent feedback following in-person delivery in 2018–19 (n = 67). Forms comprised Likert scale questionnaires with free-text boxes. Comments from the online distance learning cohort noted 'emerging' themes with regards to online learning. Emerging themes were explored in small student focus-groups (n = 4) with five members in each. This was important in establishing that the key PBL processes were delivered successfully online.

Results and discussion

Data analysis showed no significant differences between in-person and online cohorts in student experience based on domains of 'tutor approach and style', 'clinical reasoning process' and 'teamwork'. Emerging themes indicated online PBL

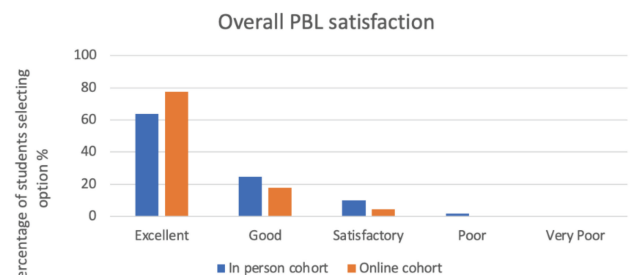


Fig 1. Overall PBL satisfaction of online (2020/21) compared with in-person (2018/19) student cohorts.

was advantageous for convenience, commute length and cost. Importantly, students acquired new technological communication skills and MS Teams offered a shared repository for resources.

Online PBL disadvantages included students feeling unable to facilitate spontaneous collaboration due to an over-formal environment that hindered social interaction and group dynamic. Students' overall PBL satisfaction ratings comparing online with in-person cohorts are shown in Fig 1.

Evaluation generated a novel list of recommendations for the university to implement into a 'hybrid' model framework of problem-based learning, to incorporate the best aspects of an online environment, including convenience and increased technological functionality. In doing so, the team hoped not only to share novel study findings directly from the voice of impacted medical students, but also to create an open forum of sharing best practice on small group teaching between courses and wider universities.

Reference

- 1 Nicolaou S, Heraclides A, Constantinou C *et al*. One size doesn't fit all: PBL tutor training and development. *Int J of Problem-Based Learning* 2021;15:2.

Authors: ^ASt George's, University of London, London, UK