Problem-Based Learning in Online Settings during COVID-19

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Abstract

Problem-based learning (PBL) provides an appropriate instructional strategy to engage student in active learning, enhance student interest, improve retention, and promote problem-solving and critical thinking skills. The course design follows a classic PBL approach with a preparation phase and a reporting phase. Due to the COVID-19 lockdown the course had to be converted to an online setting. The aim of this study is to report on student and faculty experiences in a PBL course during the COVID-19 lockdown and present potential implications for online PBL course design. While learning objectives and instructional strategy remained practically unchanged, the discussions online were done in smaller groups than originally planned. The results show that students appreciated the new small group discussion format in the online PBL course over the whole class discussion in the face-to-face setting and that an online PBL course can help students integrate knowledge and promote the deep learning approach.

Keywords: problem-based learning, case-based learning, online course design, teaching and learning, higher education, student experience