Abstract 7D

The use of PeerWise in a Student Selected Component within the Medical Curriculum led to Improvement in Examination Performance

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PeerWise is a web based system where students are able to write, answer and comment on each others multiple choice questions. It was introduced at the start of a five week Student Selected Component in head and neck anatomy for the third year medical cohort. It was not compulsory and participation in it did not contribute to the final examination marks. 39 of the total 52 students within the Student Selected Component enrolled with PeerWise and they generated 38 questions, with some students writing several questions and others none. Of those students that had written one or more questions, they scored higher in the final examination than those who did not (p<0.0005 for rank in the year, p=0.001 for percentage attained in examination). The students who had composed at least one question had improved their final examination mark by approximately. The number of questions answered did not correlate with an improved examination mark (Spearman's rho = -0.043, with percentage attained in examination (p = 0.763) and 0.041 with rank in year (p = 0.773)). This study has shown that the use of PeerWise in a Student Selected Component improves examination performance, but only when the student composes questions, and engages in the question writing process. It could be that a higher cognitive level of engagement with the course material occurs by constructing questions, providing the answers and creating a variety of options (including explanations) results in improved examination performance.

References


Denny P, Luxton-Reilly A, Hamer J. Student use of the PeerWise system. Proceedings of the 13th annual conference on innovation and technology in computer science education; Madrid, Spain; June 30-2nd July 2008; pp73-77; ITiCSE; 2008c.

Denny P, Luxton-Reilly A, Hamer J, Purchase H. Coverage of course topics in a student generated MCQ repository. Annual conference on innovation and technology


Outcomes
Have an understanding of the background to PeerWise
Appreciate the practicalities of using PeerWise
Understand how PeerWise has been used with a medical cohort, and how it can be applied throughout any curriculum