

Going for gold: using Peerwise for deeper learning and formative feedback

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Background and Aims

Students' perceptions and lack of satisfaction with feedback is an ongoing challenge, yet increasing student numbers combined with expanding staff workloads make frequent, personalised, formative feedback unsustainable. However, the importance of formative feedback to academic progression has been well documented and thus one solution is to engage students themselves in providing more self and peer feedback (1). Summative multiple choice examinations are useful as a means of assessing student knowledge and reasoning but additionally providing practice MCQs, is very labour intensive for staff. Writing good MCQs that necessitate higher levels of learning rather than just information recall, requires an in depth understanding of the topic (2). Therefore, involving students in writing these addresses both the issue of generating a large number of practice questions whilst also engaging them in deeper learning.

Summary of work and outcomes

Peerwise, a free, online resource that enables students to compose, answer and rate MCQ style questions, has been embedded into a number of our first and second year units. Students were set assignments to submit questions which were then answered and commented upon anonymously by their peers. Subsequently, students were instructed to revisit Peerwise and compose higher cognitive level 'why/how' questions to demonstrate application of knowledge based on Blooms taxonomy of learning (2). The resource includes awards of student medals for question submission, number answered or providing feedback and comments introducing a competitive element to the engagement.

Discussion

Overall the approach was positively received by the students although there was considerable variation in the engagement level of students within and between cohorts. A small percentage participated very well during the semester and competed for the medals whilst the majority preferred to use it as a revision tool. Overall assessment outcomes suggested students were performing slightly better having access to Peerwise but more data is required to fully evaluate the impact on student learning. Feedback from the students indicated that those who fully engaged with the process found it to be extremely beneficial, providing a deeper learning experience.

Conclusion

Peerwise is a useful and time efficient tool to embed within a unit to encourage students to self and peer assess and inspire a deeper approach to learning.

References

- (1) Sadler DR (1989) Formative assessment and the design of instructional systems. *Instructional Science* 18(2): 119-144
- (2) Bloom BS et al (1956) *Taxonomy of Educational Objectives*. New York McKay.
- (3) Peerwise <https://peerwise.cs.auckland.ac.nz/> (accessed 09/16)

