Use of gamification to improve student revision of physiological and pharmacological concepts—a pilot study
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Introduction

- Gamification is a teaching methodology where learners may be motivated to engage with their learning material more effectively by applying gaming mechanics to traditional education material or lessons.
- Inspired by a presentation given by Louise Robinson (University of Derby, UK) at a recent Physiological Society Education Theme workshop, we were inspired to pilot use of gamification within biomedical teaching at the University of Aberdeen.
- As well as helping students learn more effectively, we hoped such a gamification approach would improve student interactions as some of our classes have highly diverse student groups, some of whom may have to join an already established class at a late stage i.e. intercalating medical students, exchange programme students, articulating students from FE colleges.
- We had already identified that some students reported they had issues with some elements of remembering specific drug names, mechanisms of action and clinical applications, particularly if it there had been an extended periods between their last lectures on such topics.
- Upon exploring some of the easiest options available to introduce gamification, we decided to use the Quizlet application, given that it incurred no major financial outlay, and seemed to be relatively easy to use by staff and students alike.

Discussion

- Student-led generation of questions led to the development of a large question bank to help their peers prepare for assessment during term-time.
- Students may choose different ways of testing themselves using the material in the question banks. The most popular options within our student cohort appeared to be ‘Gravity’ and ‘Match’.

Methods

- Piloted use of Quizlet in a small class of 22 students. 20 out of the 22 students voluntarily participated.
- Question banks designed by students employed on summer studentships and reviewed/tested by three academic staff for accuracy/relevance.
- Students undertaking the OSPE assessment were provided with the link to the Quizlet question banks and told it had been provided as an optional revision aid, and that their performance could be kept anonymous, or they could compete with their classmates if they chose to.
- Student perceptions were obtained with a short, optional, anonymous questionnaire after OSPE grades and feedback had been reported to students and they had had time to reflect on their experiences.

Results

- How much did you use the Quizlet app to practice for the station where you had to match drugs, with targets and mechanisms? 1 = not at all, 5 = a huge amount

- Do you think that apps like Quizlet that try to ‘gamify’ revision are useful?

- Do you think that we should try to use apps like Quizlet to encourage revision/study throughout other classes in your degree?