




Supplementation: An Improved Approach to Question Based Collaborative Learning [Letter]

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Dear editor

We read with interest the article by Wynn-Lawrence et al¹ which explored the use of Question Based Collaborative Learning (QBCL) to increase awareness of and engagement with the digital curriculum map (Sofia) created for Imperial College School of Medicine. As medical students at Imperial College, we have years of experience using Sofia, and we recognise the important role that active recall plays in effective revision strategies.² Many medical students utilise online question banks and flashcards to good effect,³ and we appreciate how the authors have incorporated similar techniques and strategies within the QBCL. However, we feel that the QBCL is not being utilised to its full potential and does not fully meet the needs of medical students. We would like to put forward recommendations to allow QBCL to be a more effective study tool, fostering an even stronger engagement with digital curriculum mapping.

The QBCL teaching session involved students attempting to formulate their own multiple-choice questions based on patient cases they had encountered whilst on clinical placement. This method relies on students' exposure to clinical conditions, therefore the diversity of questions produced is limited to cases that students have seen. Given that there are 6788 intended learning outcomes (ILOs) on Sofia that students are tasked to be familiar with in their clinical years, it is unreasonable to expect that students will have had an opportunity to encounter every ILO on clinical placements. For example, Fung et al found that only 23.4% of acute presentations are admitted during normal working hours.⁴ This means that more than 75% of acute cases are not encountered by medical students during regular placement hours which, therefore, cannot be incorporated into question making during QBCLs. Students may be deprived of the opportunity to create questions based on crucially important conditions, leading to large gaps in their knowledge and suboptimal performance in both examinations and their clinical career.

A solution to this problem is to supplement the student cases that are brought to QBCLs with additional pre-written cases, featuring "common" or particularly important clinical conditions. The addition of pre-written cases into the QBCLs would allow students to cover a wider breadth of the curriculum whilst not being limited by their varying clinical exposure.

Our recommendation is therefore that the medical school creates pre-written cases, tailored towards common conditions, to supplement the cases that students provide themselves. Data from this QBCL session, alongside data from future sessions, could be used to identify topics that are underrepresented across student-made cases and questions. The medical school could then use this feedback to guide their case writing

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process in the future, ensuring that the content of the QBCLs is constantly adapting to meet the ever-changing needs of the student cohort.

Disclosure

The authors report no conflicts of interest for this communication.

References

1. Wynn-Lawrence LS, Bala L, Fletcher RJ, Wilson RK, Sam AH. Question-based collaborative learning for constructive curricular alignment. *Adv Med Edu Pract*. 2021;11:1047–1053. Dove Press. doi:10.2147/AMEP.S280972.
2. Augustin M. How to learn effectively in medical school: test yourself, learn actively, and repeat in intervals. *Yale J Biol Med*. 2014;87(2):207–212. Yale Journal of Biology and Medicine Inc.
3. Schmidmaier R, Ebersbach R, Schiller M, Hege I, Holzer M, Fischer MR. Using electronic flashcards to promote learning in medical students: retesting versus restudying. *Med Edu*. 2011;45(11):1101–1110. Blackwell Publishing Ltd. doi:10.1111/j.1365-2923.2011.04043.x.
4. Fung CY, Tan ZM, Savage A, et al. Undergraduate exposure to patient presentations on the acute medical placement: a prospective study in a London teaching hospital. *BMJ Open*. 2020;10(11):e040575. BMJ. doi:10.1136/bmjopen-2020-040575.

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