

Flipping the instructor in medical teaching

Sir,

The use of computer-based technology is notable in medical training. One such example is the use of high fidelity simulation which enables trainees to gain exposure to acute medical and surgical scenarios in a safe learning environment. Computer-based technology has also altered the way we learn, with the introduction of online evidence-based resources such as eMedicine and UpToDate as well as continuing professional development or continuing medical education accredited modules. Furthermore progression through training is reinforced through electronic portfolios for recording of 'on the job' performance.

Recent advances are also highlighted courtesy of the NEJM Knowledge+ model where an adaptive learning tool allows users preparing for board exams to be tested on areas specific to their learning needs as well as Google Glass which has been used as a wearable teaching tool (McMahon and Drazen, 2014; Peregrin, 2014; Cicero et al, 2015; Jeroudi et al, 2015).

The 'flipped classroom' model is currently being trialled as a technological adjunct to lecture-based teaching with positive findings (Tune et al, 2013; Young et al, 2014; Belfi et al, 2015). Here lecture-based content is delivered to trainees in the form of either audio or video material. Lecture time is then spent solving problems in a case-based format for example

relevant to the preparatory material. Any clarification on such scenarios is subsequently made through active feedback by the instructor.

Bisognano and Schummers (2014) wrote about 'flipping healthcare', whereby patients are placed at the centre of improving health and health care and not the provider, courtesy of the perspective of Michael Barry and Susan Edgman-Levitan (2012). The current authors wonder whether this concept should be explored in the 'flipped classroom'. Following graduation newly qualified doctors have met the required competencies in order to practice. Surely their 'fresh in their mind' experience of undergraduate days can guide their juniors in this regard.

The Socratic method of teaching or 'pimping' is well documented; 'flipping the instructor' could provide a more comfortable learning environment for candidates to learn where there may be little or no fear of asking any form of question, or uttering any form of response (Kost and Chen, 2015). Such peer-assisted learning has been well described (Ross and Cameron, 2007) and can enable the newly qualified instructor to 'develop the skills and practices of a competent teacher' as stipulated by the General Medical Council's (2014) *Tomorrow's Doctors*.

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