

# Analysis of multimodal learning styles in the contemporary medical school

This article was published in the following Dove Press journal:  
*Advances in Medical Education and Practice*

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## Dear editor

Undergraduate teaching represents a significant change in education style for individuals, presenting a challenge to preclinical medical students. Based on this, we were greatly interested in the study conducted by Parashar et al regarding the assessment of learning styles of medical students in India in the era of digitization.<sup>1</sup> Pertinently, the authors identified most students possessed multimodal learning styles, with auditory and kinesthetic being most common. As medical students within the UK, we would like to offer our perspective through discussing the applicability of authors recommendations to the contemporary medical school in the UK.

The recommendation to incorporate more problem-solving activities and case studies in teaching is a highly valuable and practical proposal. Preeti et al identified that problem-based learning is an effective modern-day educational strategy.<sup>2</sup> Through our experience, small group problem-based learning sessions have worked effectively as adjuvant teaching sessions to the primary lecture-based teaching. This is because such sessions allow for retention, but also application of medical knowledge in clinical scenarios – a key skill required in medicine.

The difficulty with the authors conclusions is that there is a degree of impracticality in ensuring multimodal teaching methods in a large medical school. For this to be met in every teaching session provided, it would require a large amount of time, resources and potentially space. Additionally, preclinical content in medicine is vast, so to provide this multimodality for each subject area would be overly strenuous on both institute and student. We recommend implementation of small yet effective additions to pre-existing teaching methods in order to boost student engagement and facilitate a degree of multimodality. This could include the use of interactive “live” quizzes completed on students phones or laptops during lectures. This method utilizes the following learning styles; kinesthetic, auditory and visual modalities engaging more students via different learning styles. These would occur at the end of a lecture-based teaching session and would increase student focus and improve information retention as demonstrated by Logan et al.<sup>3</sup> Secondly, in order to improve the delivery of the lecturers, lecturers would be provided with training in effective delivery. As the authors mentioned that lecturer delivery style influences the student's ability to learn.<sup>1</sup> A lack of adequate presenting skills can ablate the students' interest and attenuate the extent of learning.

Overall, we agree that the authors propositions would certainly be of great benefit in the contemporary medical school, with it being more student-focused and varied. However, implementation of all these methods may not be possible, owing to

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time-constraints, large volume of content and lack of facilities and space. Rather, we propose to initially implement quizzes to existing lectures and improving quality of lectures through lecturer training.

## Disclosure

The authors report no conflicts of interest in this communication.

## References

1. Parashar R, Hulke S, Pakhare A. Learning styles among first professional northern and central India medical students during digitization. *Adv Med Educ Pract*. 2019;10:1–5. doi:10.2147/AMEP.S182790
2. Preeti B, Ashish A, Shriram G. Teaching undergraduates through ‘problem based learning’ a better approach. *J Clin Diagnostic Res*. 2013;7:2896–2897.
3. Logan J, Thompson A, Marshak D. Testing to enhance retention in human. *Anatomy Anat Sci Educ*. 2012;4:243–248.

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