



A Response to: a Crafty Approach for Learning the Topographical Anatomy of the Cranial Nerves

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Dear Editor,

We read with great interest the article by Quinn describing an activity for medical students to learn the topography of cranial nerves (CNs) [1]. As medical students, we found the creation of the model an entertaining and creative way of gaining a hands-on appreciation of the CN topography in a 3-dimensional view. However, we believe that this approach may benefit from some additional features.

The author highlights that students reported benefiting from the activity most when they had sufficient prior knowledge. Whilst recalling the anatomy of the CNs before the activity is a great form of learning, a short ‘refresher’ lecture organised at the start of the activity would be useful in ensuring a similar level of anatomical knowledge amongst all participants before the hands-on activity begins. Also, the tutor-to-tutee ratio and, consequently, the level of supervision can be defining variables to the success of a learning activity [2]. As the article does not describe the level of supervision offered throughout the activity, we wonder whether supervised feedback, organised in small tutor-to-tutee ratios, could have resulted in a better learning experience for the students.

More importantly, even though the model teaches the location of CNs with respect to the brainstem, we believe it would be of greater benefit if adjacent anatomical structures were included and the course of the nerves was taught. For example, knowing that CN III runs in proximity with the posterior communicating artery (PCA) would help students understand that a PCA aneurysm can cause CN III palsy which presents with a ‘blown out’ pupil — a presentation that must be promptly recognised clinically [3]. Similarly, appreciating the course of the nerves within the cavernous sinus and the skull base foramina would help students understand the manifestation

of neurological symptoms in patients with cavernous sinus thrombosis or skull base fractures, respectively [4, 5].

Anatomy is a key centrepiece of medicine; however, the clinical significance of anatomical structures should be emphasised in early years of medical school to enable students to understand the ‘why’ as opposed to only the ‘what’. This would promote higher cognitive learning levels as defined in SOLO taxonomy, thus consolidating their learning further [6].

Declarations

Ethics Approval n/a.

Consent to Participate n/a.

Conflict of Interest The authors declare no competing interests.

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