

Empowering Medical Education: Unveiling the Significance of Dissection Competitions and Self-directed Learning

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Dear Editor,

I am writing to share an extraordinary event that unfolded at Dr. D.Y. Patil Medical College and Hospital, Pune, on August 28, 2023-A series of groundbreaking competitive dissections.

The competition, meticulously organised, brought together first-year MBBS students who were divided into teams and were assigned an anatomical region such as the gluteal region, the popliteal fossa, the brachial plexus, etc. Inspired by recent research in medical education, which emphasises the evolving landscape of medical education, the event incorporated teaching strategies aligned specifically with the principles of active and self-regulated learning [1]. These strategies, such as the allotment of specific anatomical regions to present along with judges from surgical expertise that followed-up with questions based on case scenarios, move beyond traditional methods of knowledge transmission to empower students as active participants in their learning journey. By encouraging tasks like the dissection of a given region on a cadaver, along with encouraging the participants to trace the most number of important vessels or nerves seen in that region, the competition embraced a learner-centered approach that resonates with the changing dynamics of medical education [2].

During the competition, participants were not only tasked with dissecting cadavers but were also required to present their findings in innovative and creative ways. One group of students ingeniously utilised threads of different colours pinned to a piece of wooden board to demonstrate the intricate structure of the brachial plexus. By strategically placing the threads and using varying colours, they effectively highlighted the individual nerve pathways and their relationships within the plexus, offering a visual representation that enhanced understanding for both their peers and the judges.

In another instance, a different group of students opted for a tactile approach by creating a multilayered model of the popliteal fossa. This model accurately depicted the boundaries and contents of the fossa, with each layer representing different anatomical structures. By utilising this three-dimensional representation, they provided a hands-on learning experience that allowed viewers to interact with and better comprehend the spatial relationships of the anatomical elements within the popliteal fossa. These examples showcase the students' creativity and ingenuity in effectively communicating complex anatomical concepts. By employing unconventional presentation methods such as colourful thread diagrams and tactile models, the participants not only demonstrated their understanding of the material but also engage their audience in a memorable and

impactful manner. Such innovative approaches not only enhance learning outcomes but also foster a deeper appreciation for the intricacies of anatomical structures among both students and educators alike, aligning with the findings that such engaging approaches enhance student retention and application of knowledge [1,2]. The judging criteria, firmly grounded in the principles of Problem-Based Learning (PBL) and Team-Based Learning (TBL), ensured that the participants' understanding went beyond mere memorisation [2]. Judges evaluated not only the quality of cadaveric presentations but also the practical application of anatomical knowledge by cross-examining the participants with questions that inclined toward the surgical aspects emphasising the importance of any vessel/nerve/space. This approach, as corroborated by the findings, ensures that participants were not only knowledgeable but could also apply their knowledge effectively. Such criteria align with the need for medical education to prioritise evidence of achievement and competence over rote memorisation [1-3]. The event not only showcased the students' aptitude for self-regulated learning but also highlighted the transformative impact of active learning methods. The shift from a teacher-centered to a learner-centered approach, as witnessed in various studies, was evident in the students' proactive involvement and ownership of their learning process [3,4]. In conclusion, events like the dissection competition are pivotal in reshaping the future of medical education. By embracing innovative teaching methodologies with a dedicated emphasis on active and self-regulated learning, educators pave the way for a more efficient and effective learning environment. These initiatives not only enhance anatomical knowledge but also contribute significantly to the development of essential skills, such as creativity, critical thinking, and effective communication-all vital for the medical professionals of tomorrow [3-5].

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