

The future of didactics in Anatomy from the point of view of students

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The learning of Anatomy is based traditionally on books, 2D atlases, anatomical physical models and – if accessible – cadaver dissections (1). Emerging tools, like multimedia contents, 3D virtual models or the new head-mounted displays (e.g. Oculus Rift, Samsung Gear VR), which allows to dive into virtual reality environments, are rarely taken into account even if they are nowadays available at affordable prices (2). In order to assess students' point of view on these latest technologies, we prepared an anonymous questionnaire of 9 questions based on a five-point Likert scale. The questionnaire was randomly proposed to 61 students, enrolled in the preclinical years and who had completed the course of Anatomy. The students were asked to evaluate the usefulness of different tools in preparing the exam of Anatomy and to indicate which didactic tools should be available for the study of Anatomy. They also evaluated the importance given to morphology, relations and variations of organs during the exam study. The results showed that most students found very useful (answer point: 4 or 5) multimedia sources (61%) and 3D virtual models (66%). According to students, the most important tools at disposal for learning Anatomy should be 3D virtual models (26%) and 3D models in immersive virtual reality (25%) rather than physical models (21%) or other tools. Moreover, students stated they focused on morphology (74%) and relations between organs (92%) much more than anatomical variations (17%), although patient-specific anatomy would be essential in clinical practice (3). Therefore, the results can be useful to steer didactic activities and underline the importance of considering new technologies like 3D virtual models as effective tools to improve the learning of Anatomy and to focus on inter-individual variants from the very beginning.

References

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Keywords

Virtual models; anatomy; education; student perceptions.