Enhancing the Educational Experience: How Does Digital Anatomy Compare to Physical Anatomy

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In the field of medicine, anatomy and physiology are some of the most fundamental building blocks of medical knowledge. Without anatomical proficiency, studying medicine would be like attempting to build a house without a solid foundation. Based on observations, the researcher found that studying anatomy consists of visually reviewing anatomical models and observing their main functions. This project explores a different approach in presenting anatomical knowledge by using 3D interactive anatomical structures, increasingly seen as a successful method of learning and studying anatomy in both the educational and medical field. The student researcher challenged the concept of using 3D anatomical structures by constructing an experiment comparing whether learning with digital or physical anatomical models allowed students to better understand the anatomy and physiology of the human heart. Taking two groups of 5 people, the researcher presented students with a studying or learning mentality based on their level of understanding and evenly assigned them with either a digital or physical method of observation. Once assigned, students were informed by the researcher on the main functions of the human heart using one of the two methods. When all the information was covered, each participant was sent both a heart and reflection assessment through google forms to be completed for data collection. The researcher observed that students who used the digital method of learning achieved a deeper understanding of the human heart. In conclusion, a student’s performance doesn't just depend on what information is given to them but rather how it is presented.

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